TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on the reverse side prior to initiating this form)

DATE: 4/19/2007

TRANSMITTAL NO.: 02325-1.3

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the contractor)

TO: West Palm Resident Office
4400 PGA Blvd, Suite 203
Palm Beach Gardens, FL 33410

FROM: B+B Dredging Company
451 Dinwiddie Street
Portsmouth, VA 23704

CONTRACT NO.: W912EP-06-C-0023 NA

CHECK ONE:
☐ THIS IS A NEW TRANSMITTAL
☒ THIS IS A RESUBMITTAL OF TRANSMITTAL 02325-1.2

SPECIFICATION SEC. NO. (Cover only one section with each transmittal): 02325

PROJECT TITLE AND LOCATION: 121755 Key West Harbor, 34-Foot Project Monroe County, Florida

CHECK ONE: THIS TRANSMITTAL IS FOR ☐ FIO ☒ GA ☐ DA ☐ CR

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.) b.	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See instruction no. 8) c.	NO. OF COPIES d.	CONTRACT REFERENCE DOCUMENT: SPEC. PARA. NO. e.	CONTRACT REFERENCE DOCUMENT: DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See Instruction No. 6) h.	FOR CE USE CODE i.
1	Detailed Working Method	PRECON SUBMTL	6			A	N	B

REMARKS

Add FDEP permit mods 009-EM and 010-EM to the list throughout the plan.

See attached comments

I certify that the above submitted items have been reviewed in detail and are correct and in the strict conformance with the contract drawings and specifications except as otherwise stated.

Tim Ekren for B+B Dredging

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY: Walter D. Rood

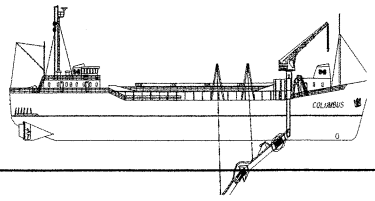
DATE: 04/20/07

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE	DATE 04/20/2007	TRANSMITTAL NO. 02325-1.3
PROJECT TITLE 121755 Key West Harbor, 34-Foot Project	CONTRACT NO. W912EP-06-C-0023 NA	PAGE 1 of 1
LOCATION Monroe County, Florida		

Item	*Description*	*Variation*	*QA Code*
1	Detailed Working Method	No	B

SECTION III - GOVERNMENT REVIEW REMARKS

Accepted subject to satisfactory performance.



B+B DREDGING COMPANY

DETAILED WORKING PLAN FOR:

Maintenance Dredging, 34-Foot Project
Key West Harbor, Monroe County, Florida
CONTRACT #W912EP-06-C-0017

Revision: 4-17-07

The intention of this plan is to summarize the working method and means by which B+B Dredging Company intends to accomplish the desired maintenance dredging task.

GENERAL SCOPE OF WORK

The project is maintenance dredging of approximately 100,000 cubic yards from the Federal Navigation channel at Key West to the designed project grade of –36 MLW plus 1 foot of allowable overdepth. The dredge areas include the main ship channel from its southern terminus, extending north to the Cut A, Widener. The excavated maintenance material will be placed outside of State waters in an Offshore Dredged Material Disposal Site (ODMDS) as approved by the US Environmental Protection Agency (EPA) and the State of Florida Department of Environmental Protection (FDEP)

PERMITS

Work will be performed in accordance with the following FDEP, and Department of Army permits and their subsequent modifications. A copy of the permits and modifications will be aboard the dredge at all times during the contract.

Florida Department of Environmental Protection
Permit/Authorization No. 0207625-001-EI
Effective Date: June 17, 2003
Expiration Data: June 17, 2013

Permit Modification No. 0207625-004-EI
Permit Modification No. 0207625-004-EM
FDEP Permit No. 0207625-0002-EM
Variance File No. 0207625-003-EV
Variance File No. 0207625-008-EV

Department of Army
Permit No. 200300203
Effective Date: July 21, 2003 Expiration Date 18 August 2007

TABLE OF CONTENTS:

DREDGE WORK AREAS

Work areas for dredging were defined by the contract plans. They include the following areas of the Main Ship Channel and Cut - A.

Channel Location	Station to Station	Range	Required Grade
Main Ship Channel	1. 26+00 to 30+00	25 to 275	36+1
	2. 30+00 to 34+00	00 to 300	36+1
	3. 39+00 to 41+00	00 to 100	36+1
	4. 165+00 to 181+00	00 to 100	36+1
Cut – A	5. (-)1+00 to 1+00	625 to 800	36+1
	6. 00+00 to 20+00	00 to 100	36+1
	7. 12+50 to 14+50	550 to 750	36+1
	8. 17+00 to 20+00	700 to 750	36+1
	9. 20+00 to 21+00	400 to 750	36+1
	10. 20+00 to 23+00	00 to 150	36+1
	11. 22+00 to 23+00	300 to 750	36+1
	12. 23+00 to 48+00	00 to 750	36+1
	13. 48+00 to 49+50	550 to 750	36+1
	14. 48+00 to 52+00	00 to 300	36+1
	15. 52+00 to 59+00	00 to 200	36+1

Enclosures:

General Location Map – Main Ship Channel to Key West Harbor
Main Ship Channel, Station 0+00 to 30+00
Main Ship Channel, Station 30+00 to 60+00
Main Ship Channel, Station 150+00 to 181+00
Cut – A, Station 0+00 to 27+00
Cut – A, Station 27+00 to 57+00
Cut – A, Station 57+00 to Cut – A, Station25+00

DREDGING OPERATIONS

1. DREDGE PLANT

Dredging will be conducted with the Trailing Hopper Dredge "Atchafalaya". The Atchafalaya is a vessel with a Coast Guard Certificate of Inspection, has a hopper capacity of 1,347 cubic yards and is highly maneuverable. The vessel is pushed by a pair of Z-Drives that allows the propellers to rotate 360 degrees, with a turning radius equivalent to its own length – 197 feet. Attachments include the brochure, profile of the vessel and its appropriate screening.

The Atchafalaya has a history of working in confined areas and difficult conditions as required by the U.S. Army Corps of Engineers, most notably the Lake Worth Inlet Extended Settling Basin, Jacksonville Navy Fuel Terminal, Miami Cruise Ship Turning Basin, Oregon Inlet, East Rockaway Inlet and Chincoteague Inlet.

The Atchafalaya drafts a maximum of nine feet light in the stern when no material is present in the hopper and a maximum draft of fourteen feet when loaded. Her draft is considerably less then expected vessel traffic, particularly cruise ships, oil tankers and naval vessels. Her shallow draft will allow the vessel to operate within the Key West Channel without any wheel wash impact to the surrounding bottoms.

2. DREDGING METHODOLOGY

The Atchafalaya is a trailing hopper dredge that will extend a drag arm to the bottom to hydraulically excavate maintenance material above the designed grade from the designated areas within the shipping channel. During dredging, the vessel will move forward at a speed of 1 to 2 knots to optimize pump production and maintain vessel control. The excavated material combined with water, will be pumped in a slurry mixture into the vessels mid ship hopper. The material will settle to the bottom of the hopper during the loading cycle while water separates to the top and is skimmed overboard.

The vessel will take two to four cuts or passes at the length of each given dredge area to obtain a load, with the width of each cut approximately three to four feet. With each dredge cut it is estimated that three to six inches of material in the vertical plane will be excavated as the drag head moves over the bottom. It is anticipated to take approximately 60 minutes to fully load the hopper during the dredging cycle.

The Atchafalaya will commence operations by taking initial dredge cuts away from the channel toe line. Instead, concentrating on material along the quarter line and closer to the channel centerline. This will give the opportunity for ship operators to understand prevailing conditions and currents that will affect dredge operations throughout the project. Furthermore, It will give the contractor an opportunity to review positioning accuracy with initial conditional hydrographic surveys.

No dredging is planned inside the 3-foot buffer zone. The only equipment that is in contact with the channel bottom during dredging is the draghead. When the vessel turns in the Main Ship Channel and Cut-A, the Mate will recognize current conditions - turning into the wind and current to assist in controlling the vessel. To ensure that all turns are non-bottom contact events the

draghead will be picked up to a depth no greater than the bottom of the Atchafalaya's keel. Furthermore with the shallow draft profile of the Atchafalaya as well as a minimal speed during turning there will be no wheel wash impact to the surrounding bottoms.

Depending on turbidity measurements the loading methods will be altered to ensure dredging is completed in accordance with the contract. The following steps, if needed will be taken to reduce turbidity:

- Reduce the speed of the pump, slowing the velocity of the slurry into the hopper.
- Increase the height of the overflow doors, allowing more time for separation of material and water in the hopper.

The sea and wind conditions will be constantly evaluated to determine the position, angle and speed of the vessel, location of particular dredge cuts and ability to work near the buffer zone at that particular time. If conditions are unsafe to work at the buffer zone the Atchafalaya will move to dredge areas where the placement of the dragarm will not be near nor do harm to hard bottom reef that might exist outside of channel limits.

After the completion of the loading cycle the drag arm will be placed on the deck and secured for transit to the designated open water placement area via the Key West Harbor Main Ship Channel. It will take approximately 180 minutes to sail the vessel to and return from the placement site, ODMDS at Easting 390,358 and Northing 561, State Plane Feet, Florida East Zone, NAD 1983. After the ship comes to a near standstill, the maintenance material in the hopper will fall from the bottom of the ship that is physically split in two (see small picture in attached Atchafalaya brochure). The sail route to and from the open water placement site is included as an attachment.

The full operation – loading of maintenance material, transit to the placement area, placement of maintenance material and transit to dredge area is considered the overall cycle and every step is recorded electronically with the Silent Inspector system as well as hand written into the Mates Log. Examples of Silent Inspector data recorded and Mates log is provided in the attachments. The contractor expects to dredge five to six loads per day, when conditions are favorable.

3. Dredging the 3 Foot Buffer:

Before each loading event, the Dredge Captain and/or the Mate will determine if it is safe to dredge up to and along the 3 foot buffer, based the Wind, Currents, Wave and Weather Conditions. ***If conditions are favorable and the crew feels that proper steerage can be maintained they will dredge along the 3-foot buffer.*** The equipment used to position the vessel for each loading event is defined in sub-paragraph 5, "Dredge Positioning and Instrumentation". If conditions force the ship towards the toe of the channel and proper steerage for positioning along the buffer line cannot be maintained, dredging along the 3-foot buffer will not occur.

4. TRANSPORT OF MATERIAL

Water and dredge material will not be allowed to discharge during transit to ODMDS. The Atchafalaya will monitor material and water levels within hopper prior to completion of each dredge cut to assure that adequate freeboard between material and top of combings exists. Additional combings have been placed above the hopper and are properly maintained.

When sea conditions are difficult the vessel will haul a reduced load, to prevent material from overflowing the combings during transit.

5. DREDGE POSITIONING AND INSTRUMENTATION (Silent Inspector)

The contractor will use Real Time Kinematic GPS (RTK) to provide constant horizontal and vertical positioning for dredging, transiting and off shore disposal. The vessel's positioning will be monitored and displayed visually in real time using, "Dredge Pack" a Coastal Oceanographic software program used by most Dredging Contractors and the US Army Corps of Engineers.

Dredge Pack provides the contractor with the ability to visually display, to accurate scaled dimensions, its real time position of the vessel in the Key West Harbor channel, buffer zones and depiction of most recent soundings. The Mate on watch, individually handling the vessel, will use the displayed information to place the drag arm, and the dredge itself, over payable (allowable material within the channel template) material during dredging operations.

The dragtender (dredge plant operator), on watch will monitor and control the dredge plant operations, specifically the drag arm and pump, during dredging operations. A drag arm mimic display provides the operator with a real time visual display of the drag arms' vertical movements and depth. The mimic also displays pump parameters including vacuum pressure, discharge pressure, pump RPM, discharge slurry velocity, and specific gravity.

The hopper dredge Atchafalaya maintains instrumentation, required computer and satellite uplink to meet Silent Inspector requirements as specified in Section 00100. The Contractor's dredge instrumentation plan detailing the Silent Inspector is provided with Detailed Working Plan. The Silent Inspector set at a 30 second recording update rate fulfills Electronic Tracking System (ETS) as required on this contract. A copy of the Silent Inspector's detailed data output in accordance with Silent Inspector requirements is provided as an attachment.

6. VESSEL OPERATOR TRAINING:

All of the Atchafalaya's ship handlers will attend a four-hour class/course that highlights the unique requirements for operating a vessel within the Florida Keys National Marine Sanctuary. ***Initial vessel operator training was performed in Febuary and scheduled to be completed on March 15th. Any additional training will be coordinated with FKNMS.***

7. ANCHORAGE PLAN

The hopper dredge Atchafalaya works on a twenty-four hour, seven day a week basis. During the work period the dredge will not need nor seek anchorage to complete any tasks within the dredging cycle.

No auxiliary plant or pipeline is required for the Atchafalaya to dredge and thus no other equipment will be on site or require anchorage of any sort.

The Atchafalaya will seek dockage with the city to take on fuel, potable water and supplies periodically or prior to and after dredging. The vessel will also seek dockage for safe harbor refuge in case of severe weather. The contractor does not expect a hurricane during this contract due to scheduling of work outside of the historical hurricane season.

Prior to commencement of work, charted and designated anchorage areas away from established resources will be reviewed and discussed with vessel operators. These areas will be noted for emergency purposes. Furthermore, A listing of Florida Keys National Marine Sanctuary no anchorage zones is provided as an attachment to this plan. Vessel operators will also be versed in these areas of NO ANCHORAGE.

Florida Keys Harbor Service can provide tug assist in case of emergency. Their contact information is as follows.

Florida Keys Harbor Service
700 Front St
Key West, FL 33040
305-296-6990

A launch will be maintained to assist in crew changes, transfer of supplies, and perform the contractor's conditional check surveys. The crewboat will secure dockage at Oceanside Marina when not in use. The contractor has no intention of anchoring the launch at anytime during the contract.

8. OPERATIONAL CONTINGENCY PLAN

B+B Dredging is concerned for the possibility of severe weather events, specifically hurricanes, mechanical failures to dredge plant, and catastrophic failures. B+B Dredging maintains a licensed and competent crew, pro active vessel maintenance program, and periodic safety and equipment inspections with the intention to minimize risk of such events.

Weather Events

B+B's Captain and shore management review weather forecasts on a daily basis to determine any change in local weather conditions. Captain has access to VHF marine weather broadcasts, internet resources as well as satellite television. The Severe Weather & Hurricane Protection Plan provided outlines the contractor contingency for severe weather.

Mechanical Failures

Pro active maintenance and equipment checks is the first and most important step to assure that the dredge plant, specifically the drag arm, is working properly throughout the contract. Inspections will be performed by the drag tender, dredge plant operator, prior to dredging the next load. Equipment checks will include but not be limited to:

Inspect for frayed wire ropes after completion of and prior to next loading cycle
Proper wire rope placement on winch drums
Hydraulic winch hoses in proper condition, no leaks.

A failure to lift the drag arm, either by parted wire or hydraulic failure, during dredging operations or commencement of dredging will require the following actions with the explicit intention to avoid damaging surrounding resources or the vessel itself.

Drag tender communicates a problem immediately to the Mate.
Mate moves the dredge to the channel centerline
Mate makes security call notifying any vessel traffic of restricted movement
Captain notifies Chief Engineer and secures vessel in deep water away from resources
Repairs to mechanical problem are made
Captain verifies that equipment is in working order while in deep water

The Atchafalaya operates with twin screws each having independent main engines. The Chief Engineer and engine department periodically inspect engines and monitor engine sensors. The Chief Engineer logs the inspections and routine monitoring daily. The Atchafalaya can also operate under one main engine, port or starboard side, if a mechanical failure occurs to the main engine.

The Captain will take the following actions if there is a main engine failure.

Captain moves the dredge to the channel centerline
Dredge plant, drag arm, secured on deck
Vessel transits to Offshore disposal, deep water
Chief Engineer assesses failure and determines repairs needed

The Atchafalaya maintains two separate ship supply generators as per its Coast Guard certificate of inspection requirements. The generators are automated to start if one or the other has a mechanical failure. The Chief Engineer performs daily engine maintenance and monitoring. Both generators are operated in a cycle to make sure that they are properly working at all times. Furthermore, The Atchafalaya maintain emergency battery power backup on communication instrumentation and life saving equipment.

Leakage/Overspillage

The Atchafalaya will be transitting to the disposal area with loaded material. The Atchafalaya recently had its hopper seals maintained in shipyard and expects no leakage while underway. In case of such leakage, the vessel will be transitting the navigational channel and thus avoiding resources. Upon disposal of remaining material, dredging operations will be suspended in order to inspect hopper seals.

Catastrophic Events

In case of an catastrophic event, such as vessel impact or sinking, the Atchafalaya's Captain will secure the vessel from dredging and sound the alarms. The Captain will notify the US Coast Guard immediately. The Captain will take direction from the US Coast Guard in order to minimize any loss of life and damages to the surroundings

9. Surveillance of Ocean Disposal

Two weeks prior to the first open water placement in the ODSMDS, B+B Dredging will notify the Florida Keys National Marine Sanctuary and the local Coast Guard Captain of the Port by Certified Mail with a copy to the Contracting Officer. The following information will be included with the notification:

1. Project Designation; Corps of Engineers' Contracting Officer's name, contract number and the Contractor's name, address and telephone number.
2. Port of Departure
3. Location of ocean disposal area
4. Quantity of material to be deposited in ocean
5. Schedule for ocean disposal, giving date and time proposed for first ocean disposal.

The Silent Inspector will track, in real-time, the horizontal location and draft condition of the Atchafalaya for the entire dredging cycle, including the dredging area and disposal.

As required, the material will be hauled to the ODMDS and placed within a radius of 500 feet of the center location at x=390,358 and y=561 (State Plane Feet, Florida East Zone, NAD 1983 coordinates).

The following digital data will be collected for each dredging and disposal cycle:

- Trip Number
- Date and time
- Vessel Name and Captain
- State Plane X & Y Coordinate
- Vessel Draft
- Exact State Plane X & Y coordinate at start of dump
- Volume of Material Disposed

10. VESSEL TRAFFIC

The Contractor expects cruise ships, naval vessels and recreational craft present in the ship channel ***and anticpates two way traffic. If required to accommodate large vessel traffic the Atchafalaya can secure its drag arm on deck within a few minutes and proceed to the ODMDS.*** The Atchafalaya monitors VHF marine channels 13 & 16 as per coastal federal regulations and ***will corrdinate with all ship traffic.***

No pipelines, anchors or other supporting equipment will be needed for neither dredging operations nor hinder navigation within the ship channel.

11. NAVIGATION AND DREDGING AIDS

Prior to commencement of work, B+B Dredging will notify the Commander, Seventh Coast Guard District of our intended operations to dredge and request that they be published in the Local Notice to Mariners. The notification will be given in sufficient time for inclusion in the Notice to Mariners at least two weeks prior to commencement of dredging operations.

Navigation aids located within or near the required dredge areas will be removed, if necessary, by the U.S. Coast Guard in advance of dredging operations. The contractor will not remove, change the location of, obstruct, willfully damage, make fast to, or interfere with any aid of navigation.

The contractor does not intend nor need to place any dredging aids nor lights on this contract to facilitate operations. Positioning will be done electronically, as outlined in this plan.

12. ORDER OF WORK:

B+B Dredging plans to commence dredging operations in the Widener of Cut - A and proceed outbound, away from Key West Harbor, dredging the three designated areas, the Main Ship Channel last.

13. Enclosures:

- Trailing Suction Hopper Dredge "Atchafalaya" Brochure, 1 page
- U.S. Coast Guard Certificate of Inspection for the Atchafalaya
- Dredge Atchafalaya Profile and Screening, 3 pages including cover
- Sail Route to ODMS, 5 pages including cover
- Example of Silent Inspector Data Output, 2 pages including cover
- Example of Mates Log, 2 pages including cover
- FKNMS No Anchorage zones

QUALITY CONTROL MEASURES

The Quality Control Plan (QCP) is a tool to ensure that all operations are in compliance with the contract requirements.

The QCP will be executed in accordance with COE ER 1180-1-6 and is established and will be maintained in compliance with paragraph 52.246-12, "Inspection of Construction" of the Contract Clauses found in section 00700. The system consists of plans, procedures and organization necessary to produce an end product that will comply with the contract requirements.

A Coordination Meeting with B+B Dredging and the USACE will be held prior to startup of dredging operations to ensure a mutual understanding of how the QCP will work. The QCP will be discussed in detail, including forms for recording Contractor Quality Control (CQC) operations, control activities, testing and administration of the system for both onsite and offsite functions. CQC for production, measurement and payment, safety, turbidity monitoring, plant and equipment location, monitoring, endangered species monitoring, environmental protection and supervision by Quality Control Personnel will be discussed.

1. PROJECT STAFFING:

Project Manager (PM) – The Project Manager will be responsible for selecting the project team, budget management and managing directly, or through a liaison, the daily operations of the project. The PM will interact directly with the USACE contracting officer's representatives as needed to accomplish the program's objectives.

Quality Control System Manager (QCSM) – The QCSM will manage the Contractor's Quality Control System and has the delegated authority sufficient to stop work not in compliance with the contract. The QCSM has no other duties. The QCSM has more than five years dredging experience on similar type projects and has completed the USACE Construction Quality Management for Contractors course within the last five years

Alternate CQ System Manager (ACQSM) – Reports directly to the QCSM, has over three years of similar work experience and has completed the USACE Construction Quality Management for Contractors course within the last five years. When the QCSM is not onsite, the ACQSM has the delegated authority sufficient to stop work not in compliance with the contract.

Either the QCSM or alternate will be on board the Atchafalaya at all times during active operations to review actions being taken.

Designated Site Safety and Health Officer – Will be responsible to conduct daily safety and health inspections and maintain a written log which includes area/operation inspected, date of inspection, identified hazards, recommended corrective actions, estimated and actual dates of corrections. He will conduct mishap investigations and complete reports, maintain applicable safety reference material on the job sites, implement and enforce accepted APP and AHA's.

Qualified Endangered Species Observers – NMFS approved, shall be onboard to monitor for sea turtles and whales. During transit to and from the placement area, the observer shall monitor from the bridge during daylight hours for the presence of endangered species, especially the right whale, during the period December through March. During dredging operations, the observer shall monitor the inflow screening for turtles and/or turtle parts.

2. QUALITY CONTROL MEASURES

Quality Control measures implemented throughout the dredging contract, as per the Quality Control Manager's and Alternate Quality Manager's direction in compliance with contract specifications will include but are not limited to the following items.

1. Inspect plant and instrumentation prior to start of operations. Perform calibrations and verifications as needed.

2. QC Manager or alternate on board at all times during active operations to review actions being taken.

3.Monitor instrumentation and data collection during operations. Stop or secure operations if concerns or questions need to be addressed.

4. Monitor navigation aids such as buoys and radar in transit, as an independent verification of electronic positioning.

5. Perform hydrographic conditional surveys to monitor dredging location and progress, both horizontally and vertically. Dredge navigation then updated immediately with the latest soundings to maximize production and minimize time on site.

TURBIDITY MONITORING – WORK PLAN

INTRODUCTION:

Reference: Key West Harbor Dredging Project – Operational Control Turbidity Monitoring Work Plan

Dredging will be conducted in the area of Widener in Cut – A, Stations 0+00 to 59+00 and in the Main Ship Channel between stations 26+00 to 41+00 and 165+00 to 181+00. Important marine resources and Outstanding Florida Waters surround these areas. To ensure that these natural resources are protected, various plans have been developed to address specific elements of a comprehensive program to monitor turbidity and assure the generation of acceptable quality data, manage collected data, communicate and disseminate findings and protect workers tasked with data collection.

Monitoring will ensure that the conditions of the permit to dredge will be followed and that marine resources will be protected. How and where the different elements of the monitoring program will be applied will be addressed in this plan.

An important aspect of the plan will be to identify naturally occurring conditions that may cause apparent permit violations – wind driven currents, natural water movement, etc. Understanding these natural events will help understand turbidity data. Also, ship movements other than the dredge will impact turbidity conditions the data collected.

PROJECT OVERVIEW:

This program has been designed to comply with the Florida Department of Environmental Protection (FDEP) and the U.S. Army Corps of Engineers (USACE) dredging permits to ensure the protection of marine resources and water quality. The monitoring will be completed in accordance as set forth in the following permits ***and their subsequent modifications***:

Florida Department of Environmental Protection
Permit/Authorization No. 0207625-001-EL
Effective Date: June 17, 2003
Expiration Data: June 17, 2013

Permit Modification No. 0207625-004-EI
Permit Modification No. 0207625-004-EM
FDEP Permit No. 0207625-0002-EM
Variance File No. 0207625-003-EV
Variance File No. 0207625-008-EV

Department of Army
Permit No. 200300203
Effective Date: July 21, 2003 Expiration Date 18 August 2007

The FDEP and USACE permits limit the amount of turbidity increases relative to background levels that dredging operations can generate. Specific compliance points, i.e., distances down current from the dredge, are cited in the permits as locations where monitoring will occur.

An independent contractor hired by the NAVY will perform turbidity monitoring on a 24-hour basis, 7 days a week.

Turbidity Monitoring results will be reported in Nephelomatric Turbidity Units (NTU) and will be measured using a standard Nephelometer and will be provided to B+B Dredging on a real time basis to allow for adjustments to be made during dredging operations.

2.2.3 PERMIT COMPLIANCE

The background compliance point or site for the edge of mixing zone measurements or within the mixing zone measurement will be taken at mid-depth and clearly outside the influence of any artifically generated turbidity plume and in a water mass representative of the plume-montoring compliance point.

The compliance point at the edge of the mixing zone will be taken at mid-depth, directly downcurrent from the dredge, or the discharge point, at the edge of a rectangular mixing zone that extends 300 m on either side of the channel and 1,500 m from the dredge within the densest portion of any visible turbidity plume. Sampling frequency will be every 2 hours.

The compliance point within the mixing zone will be mid-depth 150 m downcurrent from the dredge or discharge point, or at the nearest seagrass beds or coral/sponge communities downcurrent from the dredge or discharge point, whichever is closer. This compliance point will be no less than 100 m downcurrent from the dredge or discharge point in Turman Harbor, Cut C and Cut C widener ("the turning basin"). In Cut B, Cut A, and the Main Ship Channel, the compliance point will be no less than 50 m downcurrent from the dredge or discharge point. Normal sampling frequency will be every 2 hours.

If monitoring reveals turbidity levels at the compliance point at the edge of the mixing zone in excess of turbidity level at the corresponding background site greater than 2 nephelometric turbidity units (NTU's), construction activities will cease immediately and not resume until corrective measures have been taken and turbidity has returned to acceptable levels.

Within the mixing zone, if monitoring reveals turbidity levels at the compliance point in excess of 29 NTU's above background, construction activities will cease immediately and not resume until corrective measures have been taken and turbidity has returned to acceptable levels. Any such occurrence will be immediately reported to appropriate agencies and personnel.

If monitoring reveals turbility levels at compliance between 15 NTUs and 29 NTUs above background levels, monitoring frequency will increase to every 15 minutes. If turbidity remains stable or declines, monitor will be be continued every 15 minutes. If turbidity increases by 2 NTUs or more for 3 successive sampling events at the accelerated schedule, or remains 15 NTUs or more above background at the fourth retest, or has not returned to background levels at the end of 3 hours, construction activities will cease immediately and not resume until corrective measures have been taken and turbidity has returned to acceptable levels. Any such occurrences will be immediately reported to appropriate agencies and personnel consistent with the communications protocols as described in Section 6.

CHAIN OF RESPONSIBILITY:

We anticipate direct communication from the Turbidity Contractor to the dredge. The Turbidity Contractor will be provided the radio frequency in which the dredge monitors as well as the shipboard cell phone. Onboard personnel including the Ship Captain during daylight hours and Mates on a 24 hour basis have the authority to stop dredging if Turbidity Exceedence Occurs. If dredging operations need to be modified the Dredge Captain has the authority to adjust loading procedures. If a Turbidity Exceedence occurs loading of material will be stopped for a minimum of three hours. The dredge captain will inform the QC manager or Alternate, whoever is present, of any changed conditions or operational procedures.

The Atchafalaya will monitor radio frequencies 6, 13 & 17

Dredge Captains	- Dave Pilgrim and Victor Nelson
Dredge Mates	- David Esteve, Brian Willis, Jon Warren and William Verilla
QC Manager	- DJ Briley

TURBIDITY EXCEEDENCE

Assessment and notification by on-site personnel.

- Turbidity monitoring team observes turbidity exceedence.
- Verify instrument calibration
- If Continuing Calibration Verification (CCV) passes acceptance criteria, notify the Dredge the immediately.
- If CCV fails acceptance criteria, clean and recalibrate instrument. If the calibration passes, re-deploy instrument and retest. If calibration fails, deploy backup instrument for retest.
- B+B Dredge and COE Management Team are to be notified by field team leader, once the instrument quality assurance/quality control results pass all acceptable criteria.
- Turbidity monitoring team continues turbidity monitoring unless otherwise notified.
- Turbidity team notifies NAS-Environmental, Navy Fleet, Navy Region, Navy South Division, FKNMS, FDEP, Corps-Regulatory, Environmental Protection Agency and National Marine Fisheries.
- Copy of Exceedence Report e-mailed to all parties.
- Conference call conducted to approve dredge response to exceedence.

DREDGE RESPONSE TO TURBIDITY EXCEEDENCE

As soon as the Atchafalaya is notified of a turbidity exceedence – Per paragraph 2.2.3 Permit Compliance as noted in this plan - will discontinue dredging and proceed to the required open water placement area. It will take the vessel approximately 180 minutes to sail to the ODSM, discharge the maintenance material and return for the next dredging event.

If turbidity exceedence occurs over a number of dredging events, loading operations will be adjusted to include the following activities:

- Reduce the speed of the inflow to allow for a longer material settling time in the hopper.
- Adjust the height of the overflow doors to increase the settling time of material in the hopper.

SEA TURTLE & MANATEE PROTECTION PLAN

PROTECTION OF MANATEES AND SEA TURTLES:

Protection of Manatees and Sea Turtles during dredging and placement of dredge material will be in accordance with contract plans and specifications. The Manatee and Sea Turtle Protection plan outlines contract requirements as well as B+B Dredging goals in order minimize Sea Turtle incidences.

We will take every measure possible including instructing all personnel associated with the project to assure that all activities conducted as part of this contract will not kill, injure, capture, purse, harass or otherwise harm any sea turtles, advising each of the civil and criminal penalties involved with:

- Endangered or threatened species including whales, sea turtles, manatees and short nose sturgeon protected under the Endangered Species Act of 1973 (PL 93-205).

- In addition, all marine mammals, including porpoises, and dolphins as protected under the Marine Mammal Protection Act of 1972 (PL 92-522).

The contractor will also immediately report any collision with and/or injury to a MANATEE to the Florida Marine Patrol "MANATEE HOTLINE" 1-800-342-5367 as well as the U.S. Fish and Wildlife Service, Vero Beach Field Office (772) 562-3909.

ENDANGERED SPECIES OBSERVERS:

B+B Dredging Company will provide during hopper dredging operations Observers approved by the National Marine Fisheries (NMFS). They will possess the appropriate State of Florida and Federal approvals and permits to work with sea turtles.

Observers will continuously monitor the hopper infill screens and drag heads for turtles or turtle parts after each load cycle, 24 hours a day during the dredging mode and will record daily on observation sheets, each load whether or not sea turtles or sea turtles parts are present. They will also be responsible for:

1. Monitor take of sea turtles and aid in avoidance of Manatee and other marine mammals.

2. Examine all screens for sea turtle and sturgeon parts after each filling of the hopper is complete. Debris will be cleared from hopper screens and correctly reinstall after dredging has ceased during sail times to and from the placement area.

3. The Observer(s) shall notify the Corps Inspector and/ or the Administrative Contracting Officer as soon as possible, but no later than 24 hours after, a collision, taking of injured or uninjured or killing sea turtles. The observer(s) or Contractor shall contact Dr. Loren Mason, Chief, Environmental Branch @ (904) 232-2202 or others as directed if Area Office Corps personnel not available.

4. The Observer(s) or Contractor shall also immediately report any collision with and/or injury to a manatee to the Florida Marine Patrol "Manatee Hotline" 1-800-342-5367 as well as the U.S. Fish and Wildlife Service, Jacksonville Field Office @ 904-232-2580.

5. Maintain a log detailing each incident, including sightings, collisions with, injuring, or killing of sea turtles and sturgeons occurring during the contract. The log will become part of the daily observation sheet as an attachment. Within 10 calendar days of data collection, completed data reports shall be submitted directly to:

   USAED – Jacksonville
   Chief, Environmental Branch
   P.O. Box 4970
   Jacksonville, FL 32232-0019

   Copies of the data shall also be submitted to the Contracting Officer

Following project completion, a report summarizing the above incidents and sightings shall be submitted to the following:

Florida Fish and Wildlife Conservation Commission
Imperiled Species Management Section
620 South Meridian Street, Mail Stop 6A
Tallahassee, FL 32399-1600

Chief, Environmental Branch
U.S. Army Corps of Engineers (CESAJ-PD-E)
P.O. Box 4970
Jacksonville, FL 32232-0019

Area Engineer, South Florida Area Office
U.S. Army Corps of Engineers (CESAJ-CO-W)
4400 PGA Blvd, Suite 203
Palm Beach Gardens, FL 33410

U.S. Fish and Wildlife Services
1339 20th Street
Vero Beach, FL 32960

National Marine Fisheries Service
Protected Species Management Branch
9721 Executive Center Drive
St. Petersburg, FL 33702

5. For both sea turtle parts and whole specimens the observer shall take a tissue sample for genetic analysis. The District Office protocol (attached) shall be adhered to and prepared samples submitted to NMFS – La Jolla, CA Laboratory, care of Dr. Peter Dutton.

Dr. Loren Mason with the Corps of Engineers will be contacted to determine the appropriate facility for our transport, if a sea turtle is still alive when taken and appears to have a good chance to recovery.

HOPPER DREDGE EQUIPMENT

The hopper dredge Atchafalaya will perform with a rigid sea turtle deflector as specified in the contract. The deflector has been designed and constructed within the requirements of the contract specifications and will be maintained in operational condition during the entire dredging operation.

Screening of no greater than 4-inch by 4-inch will be provided on all hopper inflows to ensure 100 percent coverage. The method off screening will be approved prior to commencement of work and will remain in place for the duration of the project.

Proper lighting of suitable illumination will be maintained to allow the observers to safety monitor the inflow screening during non-daylight hours. Safe access will be provided to the screening areas.

HOPPER DREDGE OPERATIONS – MANATEES & RIGHT WHALES

The dredge and launch will be operating in areas of Manatee habitat during given times of the project. The dredge crew and launch Captain will take the following precautions when operating the vessel in these areas.

All vessels shall operate at "no wake/idle" speeds at all times while in waters where the draft of the vessel provides less than a four-foot clearance from the bottom, and vessels shall follow routes of deep water whenever possible.

If a Manatee(s) is spotted within 100 yards of the project area, all appropriate precaution shall be implemented by the Contractor to ensure protection of the Manatee. These precautions shall include the operation of all moving equipment no closer than 50 feet of a Manatee. If a Manatee is closer than 50 feet to moving equipment or the project area, the equipment shall be shut down and all construction activities shall cease within the waterway to ensure protection of the Manatee. Construction activities shall not resume until the Manatee has departed the project area.

HOPPER DREDGE OPERATIONS – SEA TURTLES

The dredge will operated to minimize the possibility of taking sea turtles and to comply with the requirements stated in the Incidental Take Statement provided by the National Marine Fisheries Service in their Biological Opinion.

The turtle deflector device and inflow screening shall be maintained in operational condition for the entire dredging operation.

Dredge pump operations are critical in maintaining pump suction only during the dredge cut and thus minimizing a turtle take. The contractor to minimize the dredge pump and operate in the following manners to minimize the pump suction during non-dredge cut operations.

The dredge will prime the pumps near the bottom just prior to placing the drag head on the bottom.

When lifting the drag head off the bottom, suction be maintained just long enough to clear the lines and then will cease.

No pumping will be allowed if the drag head is off the bottom for maneuvering, turning or during travel to or from the Placement Area.

Raising the drag head off the bottom to increase suction velocities will not be allowed.

Dredging operations shall cease if three sea turtles, or two endangered sea turtles are taken until a representative of the Special Projects and Enforcement Branch notifies the Permittee to resume dredging. The Sea Turtle Morality Report will be filled out immediately (within 6 hours) and sent by fax to the Special Projects and Enforcement Branch at 904-232-1904.

SEA TURTLE TRAWLING AND RELOCATION

Initiate trawling and relocation activity in the dredging area within 24-hours of the occurrence of the take. Trawling shall continue until suspended by the representative of the Special Projects and Enforcement Branch.

ENDANGERED SPECIES OBSERVER PROGRAM

LOAD DATA FORM

USACE DISTRICT: _____

CONTRACT #: _____ **Maintenance**____/**New Work** _____ **PROJECT start date** _____

PROJECT NAME: _____ **DREDGE NAME:** _____

DREDGE FIRM: _____

LOAD #: _____ **LOAD start date:** _____ **Times (24hrs): Start** _____ **End** _____

Condition of screening : **Port**_____ **Starboard** _____ **Overflow** _____

Number of dragheads in use: _____ **Type of dragheads used:** _____**Size of dragheads:** _____

Draghead deflector? YES ____ **NO** ____ **Condition of deflector:** _____

Type of material dredged: _____

Weather conditions: _____

_____

Tidal stage (CIRCLE ONE): Slack Rising High Falling Low Unknown

Beaufort Sea States (Winds/Wave Height) (CIRCLE ONE)

0 = <1 knot/ 0 ft	**3** = 7-10 knot/ 2 ft	**6** = 22-27 knot/10 ft	**9** = 41-47 knot/23 ft	**12** = >63 knot/45
1 = 1- 3 knot/ 0.25 ft	**4** = 11-16 knot/ 4 ft	**7** = 28-33 knot/14 ft	**10** = 48-55 knot/29 ft	
2 = 4- 6 knot/ 0.5 ft	**5** = 17-21 knot/ 6 ft	**8** = 34-40 knot/18 ft	**11** = 56-63 knot/37 ft	

Waves: _____ **ft** **Wind (speed & direction):** _____

AIR TEMP: _____ **°C/°F** (°F = 9/5 (°C) + 32; °C = 5/9 (°F - 32))

WATER TEMP: Surface _____ **°C /°F** **Column (mid-depth)** _____ **°C /°F** **Bottom** _____ **°C /°F**

SCREEN TYPE

_____	**Inflow screening:**	**None**	**25%**	**50%**	**75%**	**100%**
_____	**Overflow screening:**	**None**	**25%**	**50%**	**75%**	**100%**
_____	**Other screening:**	**None**	**25%**	**50%**	**75%**	**100%**

PORT SCREEN CONTENTS: _____

_____

STARBOARD SCREEN CONTENTS: _____

_____

_____

Estimate number entrained on this load for the following:

Sturgeon (any species) _____

Shark (any species) _____

Horseshoe crab _____

Blue crab _____

TURTLE OR TURTLE PARTS PRESENT THIS LOAD: YES _____ **NO** _____

SPECIES OF TURTLE TAKE: Unknown Loggerhead Green Kemp's ridley Hawksbill Leatherback

Comments: _____

_____

Number observers used/24hrs: _____ **% Monitoring/24 hrs: None 25% 50% 75% 100%**

Observer's name: _____ **Observer firm**_____

Observer signature _____

ENDANGERED SPECIES OBSERVER PROGRAM

DAILY REPORT

USACE DISTRICT: _____

PROJECT NAME: _____ **DREDGE NAME:** _____

Date: _____ **Load #s:** _____ **Areas dredge worked:** _____

Beaufort Sea State: 0 1 2 3 4 5 6 7 8 9 10 11 12

AIR TEMP: _____ °C/°F (°F = 9/5 (°C) + 32; °C = 5/9 (°F - 32))

WATER TEMP: Surface _____ °C /°F Column (mid-depth) _____ °C /°F Bottom _____ °C /°F

Condition of deflector: _____ **Condition of screening:** _____

Were there incidents involving endangered or protected species? YES ____ NO ____

Which species? (complete incident form(s)) _____

Comments (type of material, biological specimens, unusual circumstances, etc): _____

BRIDGE WATCH SUMMARY

Time	Species	# Sightings/# Animals	Location/Comments
		/	
		/	
		/	
		/	
		/	
		/	
		/	
		/	
		/	
		/	
		/	
		/	
		/	
		/	
		/	
		/	

Observer name _____

ENDANGERED SPECIES OBSERVER PROGRAM

WEEKLY SUMMARY

USACE DISTRICT: _____

PROJECT NAME: _____ **DREDGE NAME:** _____

Dates: _____ - _____ **Load #s:** _____

Areas dredge worked: _____

Were there incidents involving endangered or protected species? **YES** ____ **NO** ____

Which species? _____

Comments: _____

BRIDGE WATCH SUMMARY

Date/Time	Species	# Sightings/# Animals	Location/Comments
		/_____	
		/_____	
		/_____	
		/_____	
		/_____	
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		/_____	
		/_____	
		/_____	
		/_____	
		/_____	

Observer name _____

ENDANGERED SPECIES OBSERVER PROGRAM

WEEKLY SUMMARY

USACE DISTRICT: _____

PROJECT NAME: _____ **DREDGE NAME:** _____

Dates: _____ - _____ **Load #s:** _____

Areas dredge worked: _____

Were there incidents involving endangered or protected species? **YES** ____ **NO** ____

Which species? _____

Comments: _____

BRIDGE WATCH SUMMARY

Date/Time	Species	# Sightings/# Animals	Location/Comments
		/	
		/	
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		/	
		/	

Observer name _____

ENDANGERED SPECIES OBSERVER PROGRAM

SEA TURTLE INCIDENTAL TAKE DATA FORM

USACE DISTRICT:_____

PROJECT NAME: _____ DREDGE NAME: _____

DATE: _____ Time turtle take recovered (24hr): _____ Turtle take # for project: _____

LOAD #: _____ Times (24hrs): Start _____ End _____ Load start date _____

SPECIES OF TURTLE TAKE: Unknown Loggerhead Green Kemp's ridley Hawksbill Leatherback

Channel location of take: Latitude _____ Longitude _____

Other location / Channel description (e.g. buoy markers, landmarks):_____

_____

Location take recovered on dredge:_____

Number of dragheads in use at time of incident: _____ Draghead deflector? YES ___ NO ___

Condition of deflector:_____ Condition of screening: _____

Beaufort Sea State: 0 1 2 3 4 5 6 7 8 9 10 11 12

AIR TEMP: _____ °C/°F (°F = 9/5 (°C) + 32; °C = 5/9 (°F - 32))

WATER TEMP: Surface _____ °C/°F Column (mid-depth) _____ °C/°F Bottom _____ °C/°F

Condition of specimen: _____

_____

_____

0 = Alive; 1 = Fresh dead; 2 = Moderately decomposed; 3 = Severely decomposed; 4 = skeleton/old bone; 5 = undetermined

Sex: M F UN How determined?_____ Age class: Juv ___ Sub-Adult ___ Adult ___ UN ___

Measurements: Circle units

Plastron Length:	_____ cm/in	Head Width:	_____ cm/in
Carapace Straight Length:	_____ cm/in	Plastron Width:	_____ cm/in
Carapace Curved Length:	_____ cm/in	Carapace Straight Width:	_____ cm/in
		Carapace Curved Width:	_____ cm/in

Measurement/description of part:_____

Genetic samples taken: YES ___ NO ___ Photos taken: YES ___ NO ___

Turtle tagged?: YES ___ NO ___ Tag type:_____ Tag #: _____ Tag date: _____

Final disposition of specimen: _____

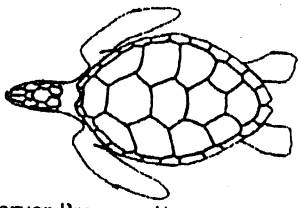
Comments: _____

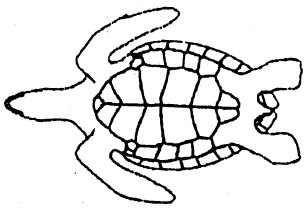
_____

Load data form attached: YES ___NO ___ Dredge load log attached: YES ___NO ___

Observer's name _____

Use diagrams below to illustrate specimen/part recovered:

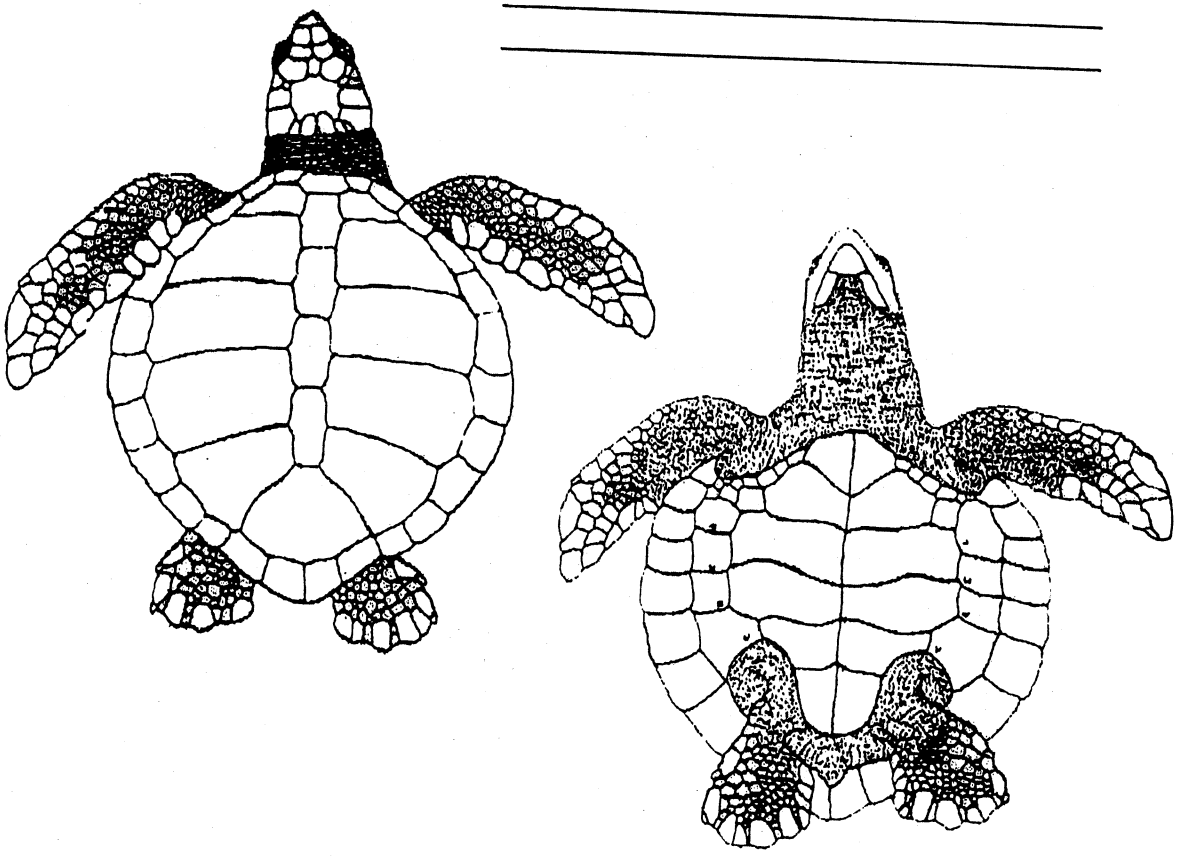




Kemp's Ridley (*Lepidochelys kempii)*

Shade areas of turtle that are missing; sketch cracks and lacerations

Comments: _____

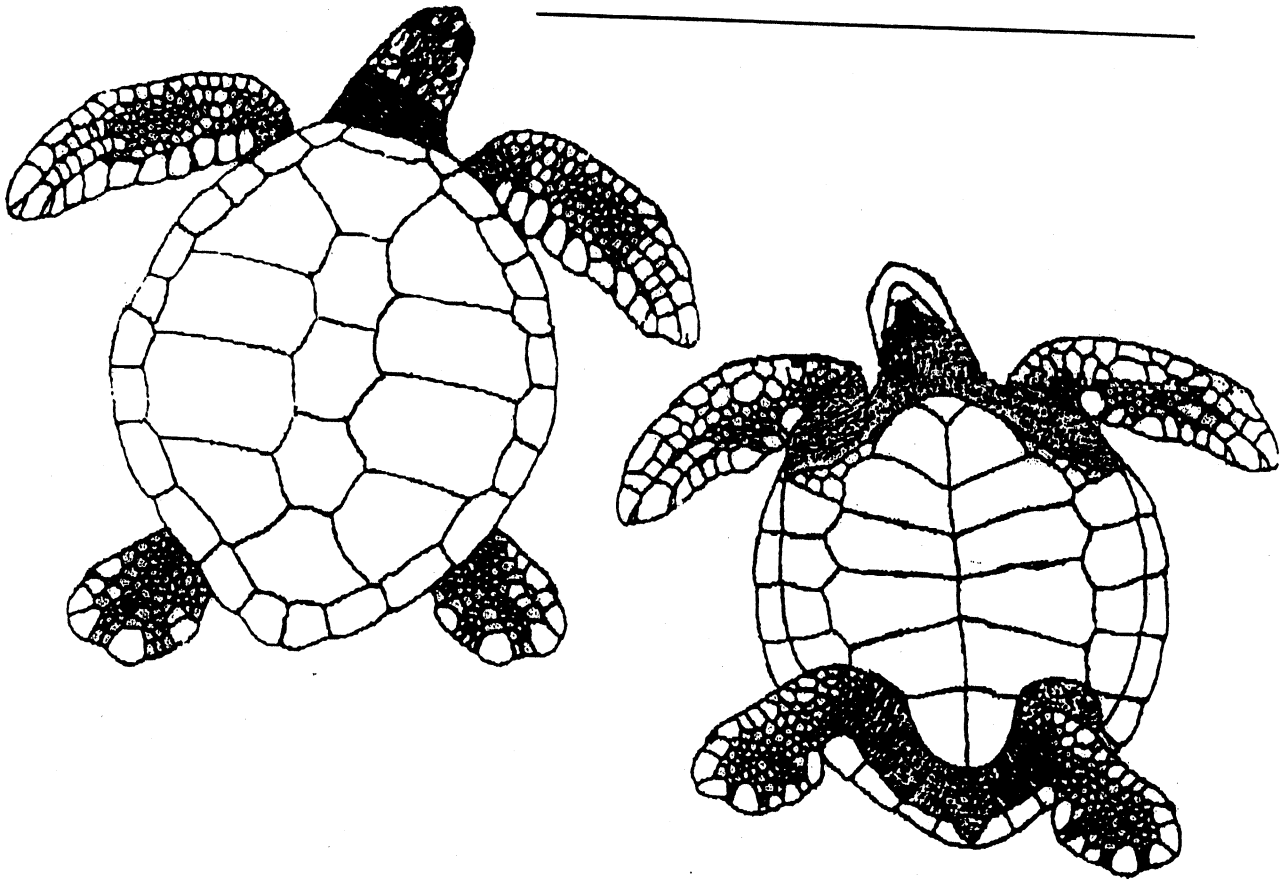


Diagrams by Tom McFarland

Green turtle (*Chelonia mydas)*

Shade areas of turtle that are missing; sketch cracks and lacerations

Comments: _____

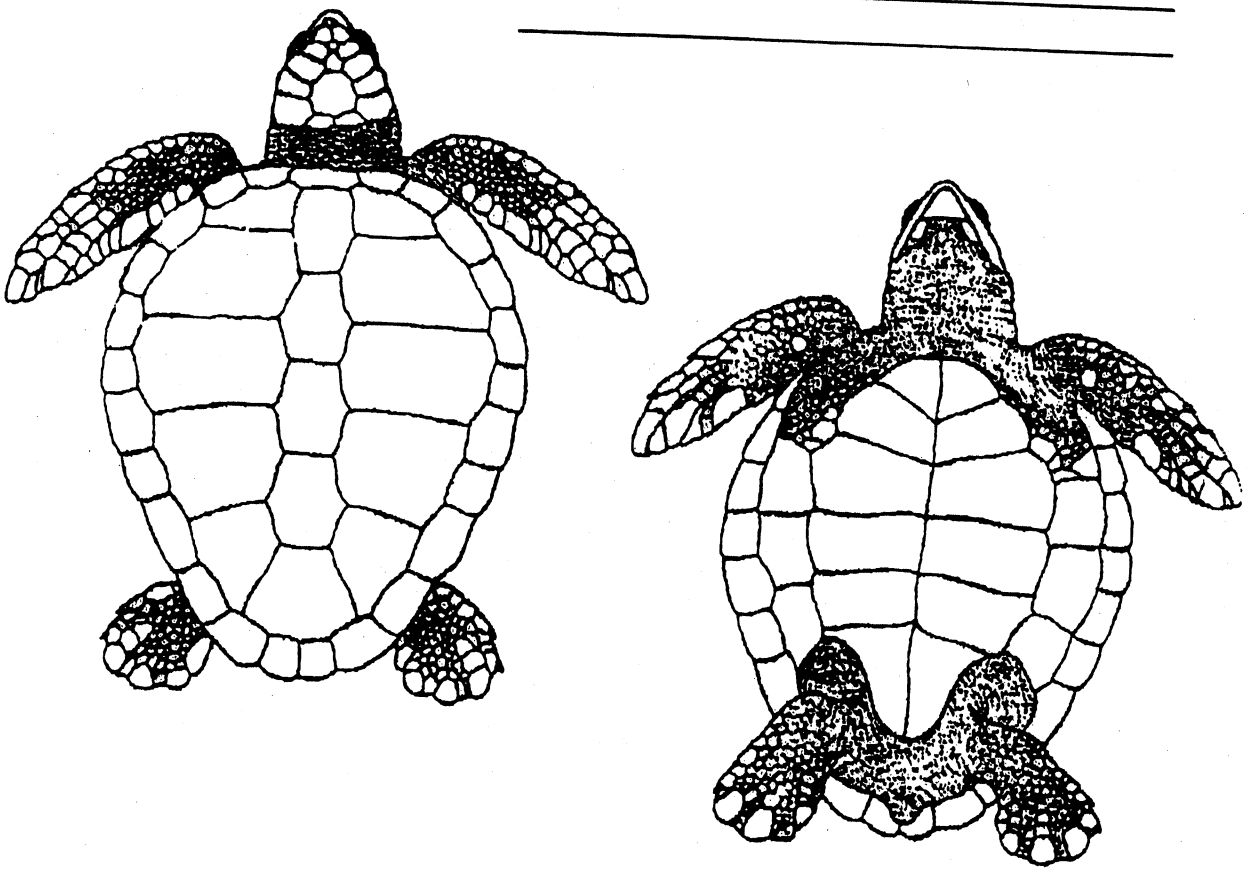


Diagrams by Tom McFarland

Loggerhead (*Caretta caretta)*

Shade areas of turtle that are missing; sketch cracks and lacerations

Comments: _____

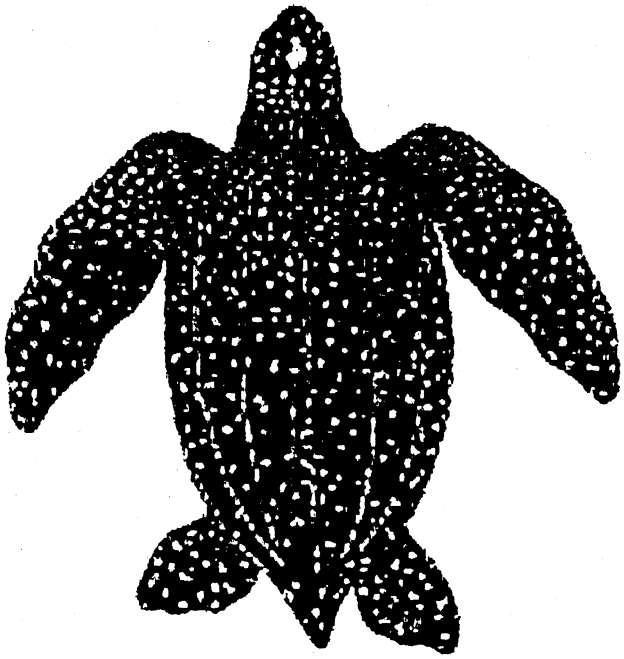


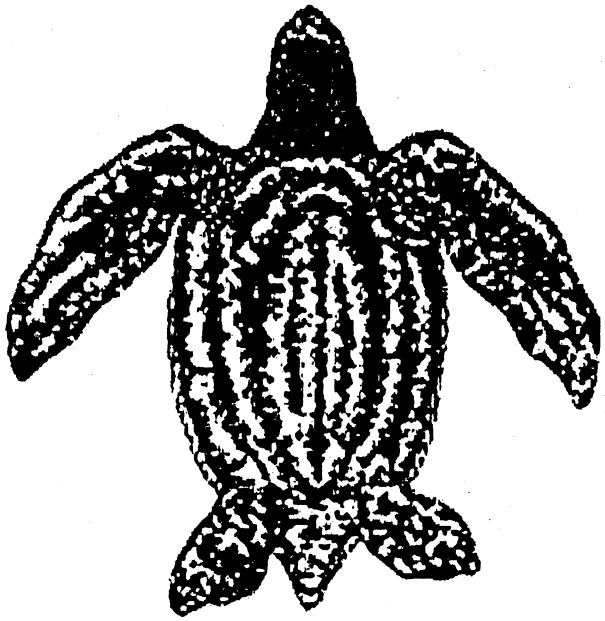
Diagrams by Tom McFarland

Leatherback (*Dermochelys coriacea)*

Shade areas of turtle that are missing; sketch cracks and lacerations

Comments: _____





Diagrams by Tom McFarland

ENDANGERED SPECIES OBSERVER PROGRAM

STURGEON INCIDENTAL TAKE DATA FORM

USACE DISTRICT: _____

PROJECT NAME: _____ DREDGE NAME: _____

DATE: _____ Time sturgeon take recovered (24hr): _____ Sturgeon # for project: _____

LOAD #: _____ Times (24hrs): Start _____ End _____ Load start date _____

SPECIES OF STURGEON TAKE: Shortnose _____ Gulf _____ Other _____ Unknown _____

Channel location of take: Latitude _____ Longitude _____

Other location / Channel description (e.g. buoy markers, landmarks): _____

_____

Location take recovered on dredge: _____

Number of dragheads in use at time of incident: _____ Draghead deflector? YES ____ NO ____

Condition of deflector: _____ Condition of screening: _____

Beaufort Sea State: 0 1 2 3 4 5 6 7 8 9 10 11 12

AIR TEMP: _____ °C/°F (°F = 9/5 (°C) + 32; °C = 5/9 (°F - 32))

WATER TEMP: Surface _____ °C /°F Column (mid-depth) _____ °C /°F Bottom _____ °C /°F

Condition of specimen: _____

_____

_____

0 = Alive; 1 = Fresh dead; 2 = Moderately decomposed; 3 = Severely decomposed; 4 = skeleton/old bone; 5 = undetermined

Measurements/description of specimen: _____

_____

_____

Genetic samples taken: YES ____ NO ____ Photos taken: YES ____ NO ____

Sample frozen/preserved: YES ____ NO ____

Final disposition of specimen: _____

Comments: _____

_____

_____

_____

Load data form attached: YES ____NO ____ Dredge load log attached: YES ____NO ____

Observer's name _____

Use diagram below to illustrate specimen/part recovered:

MANATEE SIGHTING FORM

Date of sighting_____

Animal: Dead or Alive (circle one) Time of Sighting_____am/pm

Location:_____
(county) (nearest town)

_____
(river) (specifics)

Observer's name_____

Phone #: _____
(work) (home)

Number or manatees_____Size(s) of animal_____

Type of activity (feeding, resting,actively swimming, drinking, etc.)

_____

Direction of movement: (upriver, downriver or local)_____

Remarks:(Scars, marks, injuires)_____

_____

Report received by: Name_____

Date and time of report:_____

Source of report:(phone call, infield)_____

Contact Tom or Sally Murphy Immediately with manatee sighting(s)
Green Pond 843-844-2473 Fort Johnson 843-762-5015
Home: 843-846-6929

SCREENING PLAN

The goal of the Sea Turtle, Whale, and Gulf Sturgeon Protection Plan is zero incidences for this project by maintaining a Turtle Excluder Device and appropriate operational procedures. The screening plan is to ensure placement of 4-inch by 4-inch screening in order to provide 100 percent coverage of the inflow and thus confirm that no turtle incidence has taken place on this project.

Screening Placement

Screening in accordance with contract specifications is required of 100 percent inflow or outflow at all times.

Screening is placed on the drag head in order to provide immediate 100% inflow coverage. The Atchafalaya's intention is minimize the possibility of any turtle take, screening of drag head along with Turtle Excluder Device, TED, and proper operational procedures provides the best chance to meet our goal.

Screening is placed on the discharge chute into the hopper in three locations. The discharge chute deposits material via two bottom doors and the end of the discharge chute. Screening, 4"x4", is placed on the bottom of the doors and can be accessed by a top hatch for inspection.

Screening is placed at the end and along the sides of the discharge chute. Side screens guard against over spillage and loss of contents into the hopper when the front screen is hit by the inflow. A side-screening diagram at the end of the discharge chute is attached.

The screening at the end of the discharge chute is placed in such a way to screen the oncoming inflow as well as providing a safe and easy way to enter the chute. The Crew as well as endangered species observers diligently inspects the screening during dredging operations to ensure 100% screening of inflow. Our intention is to maintain appropriate screening with proactive operational stance while not imposing additional safety risks upon our crew or the observers.

Inflow screening will be inspected and approved prior to commencement of work and will remain in place for the entire duration of the project. Dredging operations will be suspended if the screening is blocked or clogged by debris or removed for maintenance. Dredging operations will only resume when debris is cleared from the screening and/or appropriate repairs are taken to ensure 100% coverage of inflow. At no times is the contractor allowed to operate without screening in place.

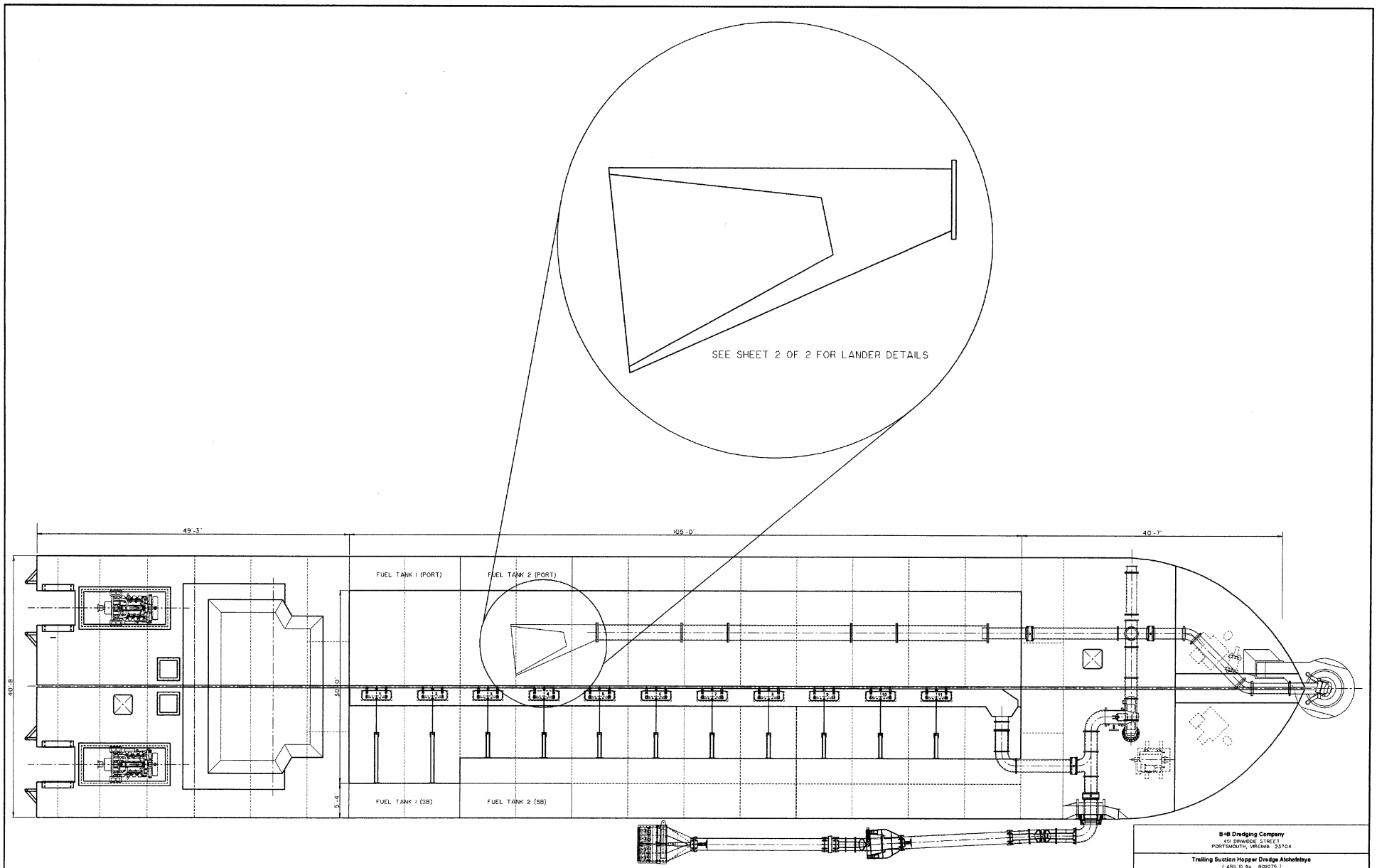
SCREENING MAINTENANCE

The deck crew under the direction of the Captain will periodically inspect the screening for any defects, wear and tear, and other problems might prevent the inflow from properly going through the screens. Any deficiencies will be expressed to and noted by the QC Manager. Corrective actions will be taken to fix the deficiencies.

OPERATIONS

Debris such as shell and wood can get into the pump and clog the screening, rendering the screening ineffective. The following operational procedure shall be adhered to during dredging operations.

> Mate and Drag-tender will observe the discharge to ensure that 100% inflow is being properly screened. The Mate and Drag-tender will suspend dredging operations, lock out the pump, and clear any debris that is hindering the proper screening of inflow. The Mate and Drag-tender will resume operations only if the inflow screening is clear of debris.



PLAN VIEW

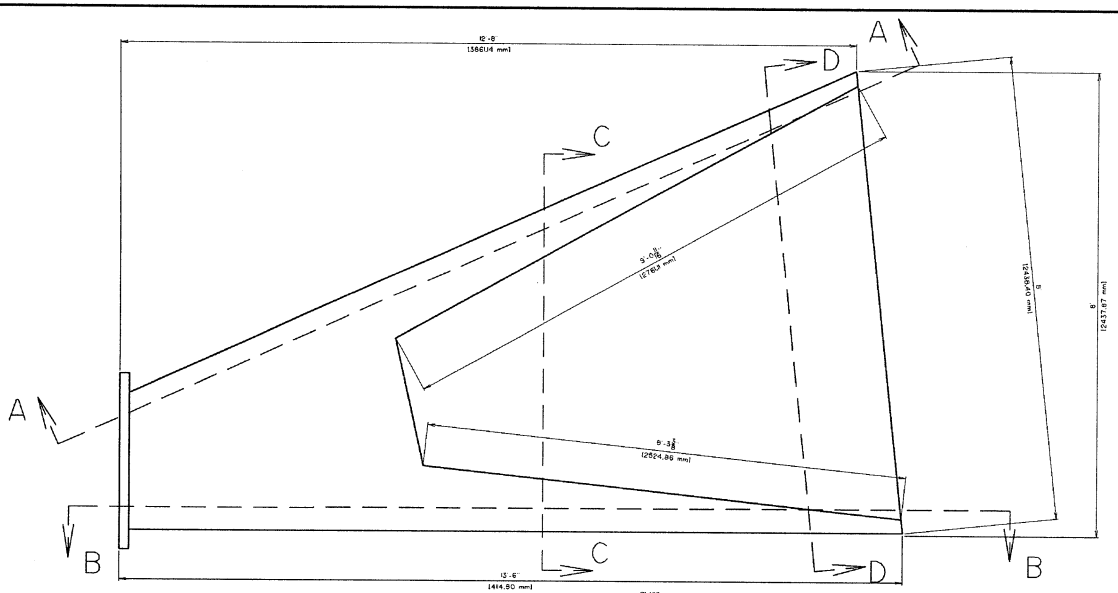
B+B Dredging Company
45 DINWIDDIE STREET
PORTSMOUTH, VIRGINIA 23704

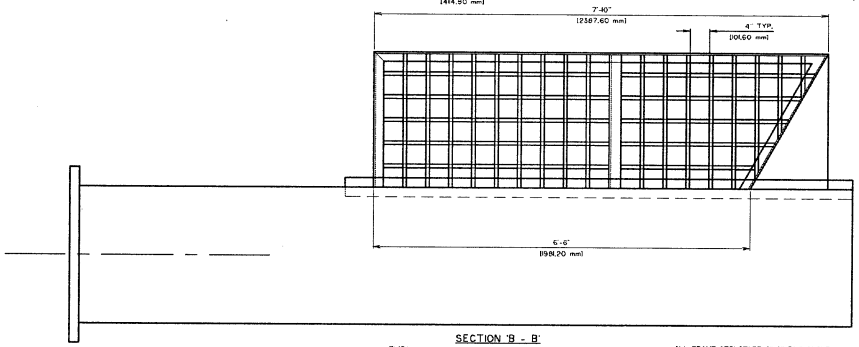
Trailing Suction Hopper Dredge Atchafalaya
(ABS ID No. 8019076)

PLAN VIEW

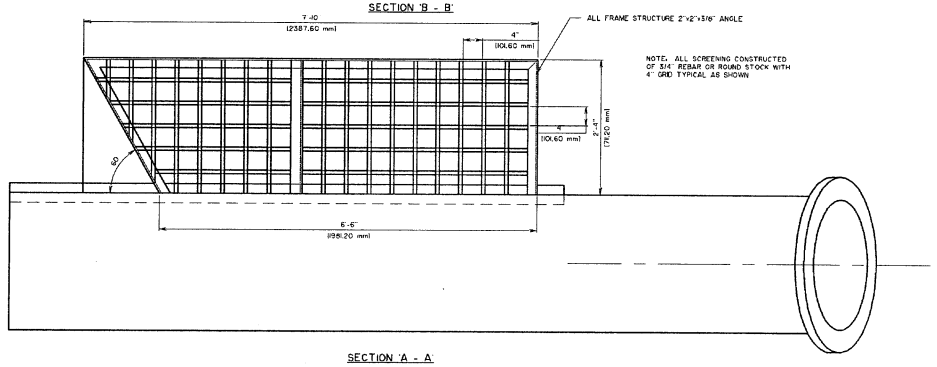
DRAWN: H.B.B.	SCALE: NTS
DESIGNED: H.B.B.	ORIGINAL DWG NO.: N/A
ELECT. FILE NAME:	REVISION MARK:
DATE DRAWN: -	**DRAWING NUMBER: -**
APPROVED:	**SHEET NO.: 1 OF 2**

REVISIONS		
NO.	DESCRIPTION	DATE

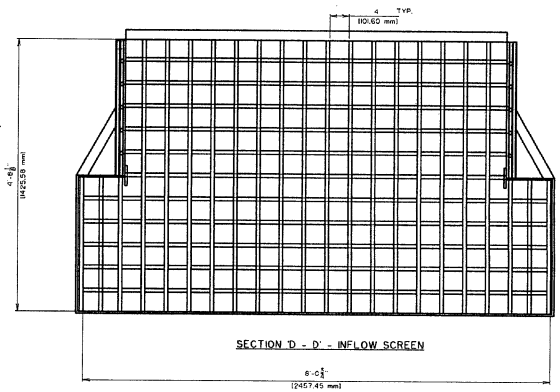




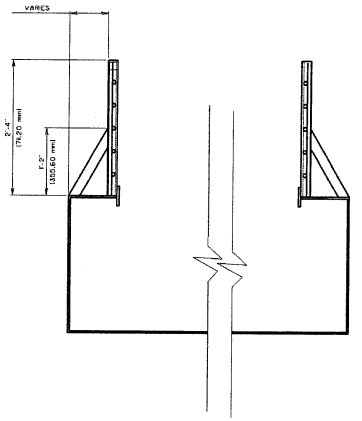
SECTION 'B - B'



SECTION 'A - A'



SECTION 'D - D' - INFLOW SCREEN



SECTION 'C - C'

B+B Dredging Company 451 DINWIDDIE STREET PORTSMOUTH, VIRGINIA 23704	
Trailing Suction Hopper Dredge Alchafalaya (ABS ID No. 6081075)	
LANDER SCREEN MODIFICATIONS	
DRAWN: H.B.B.	SCALE: 1" = 1'-0"
DESIGNED: H.B.B.	ORIGINAL DWG NO.: N/A
ELECT. FILE NAME:	REVISION MARK:
DATE DRAWN:	DRAWING NUMBER: -
APPROVED:	SHEET NO.: 1 OF 1

CONTINGENCY PLAN – SEVERE WEATHER

SEVERE WEATHER & HURRICANE
PROTECTION PLAN

W912EP-06-C-0023
MAINTENANCE DREDGING
34-FOOT PROJECT
KEY WEST, FLORIDA

The following is a Severe Storm Preparedness Plan, standardizing a response procedure when Nature and her elements constitute a threat. The plan includes responses for a developing hurricane or rapidly changing meteorological conditions such as severe thunderstorms.

Weather conditions expected for this project include the possibility of severe thunderstorms. There is always a remote possibility that hurricanes or developing storms could occur during this project's time frame.

This plan recognizes the following equipment and conditions on site:

Safe Harbor — ***Truman Harbor East Quay Wall***
City of Key West, FL

Notification — **Mr. Ray Archer, City of Key West**
Port Operations
305-293-6481 or Rosa @ 305-293-6439

Captain of the Port
United States Coast Guard
Sector Key West

Equipment — Hopper Dredge "Atchafalaya"

Hopper dredge Atchafalaya is self-contained and self-propelled vessel that can secure its dredge plant within minutes. It is capable of proceeding directly to safe harbor under its own power. It is expected that the Atchafalaya can be secured at safe harbor within six hours of notification to leave project site. The dredge Atchafalaya can sustain seas of up to six to eight feet during dredging operation as well as sustained winds of up to 40 mph.

Launch "Cape Anne"

Launch Cape Anne is a thirty-seven foot crewboat that can be secured at safe harbor in Key West within two hours of notification. No personnel are required onboard while the vessel is secured at dock.

DEVELOPING STORMS (HURRICANES)

The following will be based on weather conditions forecast as follows: SUSTAINED WINDS OF 35 KNOTS, OR ABOVE, AND/OR GUST OF 35 TO 40 KNOTS, OR ABOVE. MAY CONTAIN RAIN AND/OR RAIN SQUALLS ACCOMPANIED BY HIGH WINDS.

A. CONDITION V

Characteristics: Possible threat of storm within six days

Actions:

1. Whenever a hurricane or severe storm reaches a position where its location and travel direction could threaten the exposed job site within six days, Condition V is initiated.

2. Daily checks with the U.S. Weather Bureau and/or weather radio to verify the storm's position, intensity, direction, predicted path and speed of movement. All parties informed of weather checks

3. Safe Harbor locations are notified of concern.

B. CONDITION IV

Characteristics: Possible threat of storm within seventy-two (72) hours.

Actions:

1. Non-essential gear and equipment should be stowed and/or moved to a place of refuge. Movable equipment, i.e., drums, tanks, barrels, reels, spools, etc., shall be securely lashed and made fast to the vessel or structure.

2. Priority repairs needed to prepare for storm's threat should be made immediately.

3. A six (6) hour weather watch initiated.

C. CONDITION III.

Characteristics: Storm within general area. (Within forty-eight hours of location.)

Actions:

1. Attendant plant on the project shall be moved to safe harbor – ***Truman Harbor, Quay Wall***

2. Dredge shall be made ready to get underway within three hours of notification.

3. A three (3) hour weather watch initiated.

D. CONDITION II

Characteristics: Storm n near vicinity (50 to 75 miles -- possibility that it will pass over location, or very near location).

Actions:

1. Dredges to be in or very near to safe harbor – ***Truman Harbor, Quay Wall.***

2. All non-essential personnel are now evacuated to land based facilities, unless deemed otherwise by the Captain or QCM.

   Remaining crew shall be instructed to keep movement to a minimum, in order to prevent accidents as result of slips, falls, and from debris. ALL PERSONNEL SHALL HAVE ON LIFE VESTS.

3. The Dredge Captain will inspect preparations to insure that equipment is adequately secured and battened down.

4. A CONSTANT WEATHER WATCH AND VESSEL DAMAGE CONTROL is set up and maintained through storm's approach.

E. CONDITION I

Characteristics: Storm is imminent and will pass directly over, or very near to location within three (3) to six (6) hours.

Actions

1. All personnel remaining on board, if any, should be assigned to specific protected locations and should remain in continuous contact with the Dredge Captain. Movement should be kept to a minimum.

2. ALL PERSONNEL SHALL BE INSTRUCTED TO KEEP LIFE VESTS ON UNTIL AFTER THE STORM HAS PASSED.

3. The ONLY equipment or devices kept operating at this time should be those necessary to maintain vessel integrity and sea worthiness.

After the storm has passed, all hands shall turn to and remove any and all debris from the vessel and equipment. The vessel or equipment shall be made ship-shape as rapidly as possible.

In the public interest, any refugees and/or survivors shall be assisted if and where possible.

SEVERE WEATHER

Rapidly developing storms may be expected in this contract area at this time of year. Rapidly developing storms may include thunderstorms (most often occurring during the late afternoon), electrical storms, and tornados. These storms are often brief in duration. However, they may develop conditions that are very much a threat.

Paying attention to local weather reports and visual observations are essential to identify rapidly developing severe weather. Any such reports or warnings shall be directed immediately to appropriate Captains and Supervisory personnel. This will allow for adequate and immediate communication of threats.

Visual observation of thunderstorms are most commonly associated with severe weather can be noted by their four distinctive characteristics.

1. An Anvil Top. It will lean in the direction of the upper wind and generally tells the direction the storm is moving.

2. The main body of the cloud is a large Cumulus of great height with cauliflower sides.

3. A Roll Cloud is formed along the leading edge of the base of the Cumulus Cloud.

4. There is a dark area within the storm extending from the base of the cloud to the earth.

Due to rapid movement of such severe weather the following procedures are established in order to provide a minimum level of safety and preparedness.

Hopper Dredge

1. Personnel being quartered shall be awakened and be prepared to meet station bill requirements.
2. All personnel will don life preservers and minimize movement on exterior locations and in exposed areas. NO PERSONNEL ON DECK UNLESS DEEMED NECESSARY BY CAPTAIN.
3. All loose and movable equipment will be stowed and secured immediate

Shore personnel and Crewboat

1. Secure refuge to be sought and minimize movement on exterior locations and in exposed areas.

RESOURCE HEALTH/SEDIMENTATION MONITORING PLAN (RHSM)

INTRODUCTION:

REFERENCE: - Key West Maintenance Dredging, Resource Health and Sedimentation Monitoring Plan

This plan is the responsibility of ***U.S. Navy and/or their contractor*** to properly monitor and measure sedimentation and resource health before, during and after dredging. B+B Dredging is required to respond to their findings and if necessary take corrective actions if exceedeence events occur due to the dredging activity.

The objective of the RHSM Plan is to use to coral and seagrass health and sedimentation measurements at selected locations adjacent to the work areas as indicators of potential impacts to benthic resources.

If excessive sediment accumulation is observed, causing potential impacts to the resource health, the following actions may need to be initiated:

- Adjustment of dredging activities
- Adjustment to the dredging pattern
- Relocation of the dredge to a different area
- Increased frequency of monitoring

CHAIN OF RESPONSIBILITY:

We anticipate direct communication from the monitoring staff to our onsite management, including but not limited to the Project Manager, Dredge Captain, QCSM, Dredge Mate on watch and AQCSM. Each individual has the authority to stop the dredge from loading. If Turbidity Exceedence or Reef Health Triggers Occur, dredging operations will be modified, moved to a different if available or cease until an acceptable dredging procedures can be utilized.

RESOURCE HEALTH OR SEDIMENTATION EXCEEDENCE

- Dive/Field Personnel observe resource health or sedimentation exceedence.
- Confirm observations/measurements.
- Complete Initial Exceedence/Damage Incident Assessment Report Form.
- Field Chief scientist immediately notifies proper Agencies with Exceedence/Initial Report. Discussions will determine if the exceedence is hard or soft trigger event.
- Field survey team continues Resource Health and Sedimentation Monitoring (RHSM) survey unless otherwise notified.
- For both soft and hard trigger events, notification will be given to the USACE, B+B Dredging, NAS-Environmental, Navy Fleet, Navy Region, Navy South Division, FDEP, EPA and NMFS. A conference call time also will be setup during initial notification of event.
- Conference call conducted to discuss response to exceedence.

DREDGE RESPONSE TO EXCEEDENCE

If practical after exceedence, loading operations will be adjusted to include the following activities:

- Reduce the speed of the inflow to allow for a longer settling time of dredge material in the hopper.
- Adjust the height of the overflow doors to increase the settling time of dredge material in the hopper.

CATASTROPHIC RESOURCE DAMAGE INCIDENT

Project related catastrophic resource damage incident discovered.

- Contractor Field Personnel confirm catastrophic resource damage incident.
- Complete Initial Exceedence/Damage Incident Assessment Report Form.
- On-scene field team leader calls COE-Management and B+B Dredging representatives and reports incident.
- On-scene field team leader then calls USACE, USCG, Florida Fish and Wildlife Conservation Commission (FFWCC), NAS-Environmental, Navy Fleet, Navy Region, Navy South Division, FKNMS, FDEP, Corps-Regulatory, EPA and NMFS.
- CSA office sets up conference call time.
- Copy of Incident Report e-mailed to all parties above.
- On-scene team standing by to collect additional information if requested.
- Conference call conducted to discuss response to incident and to implement additional emergency response if warranted.

B+B DREDGING RESPONSE TO CATASTROPHIC RESOURCE DAMAGE INCIDENT

1. If the Atchafalaya directly impacts a resource, an incident report will be written by the ships captain and will include all Silent Inspector data during the period leading up to, during the impact and after the impact to confirm the location of the vessel.

2. If a catastrophic resource damage occurs such that the ship does not directly impact or is not noted, all the silent inspector information will be complied since the last monitoring date of the resource allowing the track of the ship since that period to be confirmed.

B+B DREDGING's RESPONSE TO ADDITIONAL PERMIT PROVISIONS

Provisions to 0207625-004-EM, Key West Channel Maintenance Dredging.

1. The permittee shall conduct pre- and post-construction assessments to document primary and secondary impacts of the dredging project. The assessments shall include:

   a. Quantitative descriptions of benthic communities:

      The Resource Health and Sedimentation Monitoring Plan addresses this item.

   b. Descriptions of turbidity levels:

      The Operational Control Turbidity Monitoring Work Plan addresses this item.

   c. Quantify in an estimate potential direct and indirect impacts of Fish Habitat

      See – Navy

   d. Mitigation Plan success

      The Navy's Mitigation Plan addresses this item.

   e. Monitoring Plan for Sedimentation/Turbidity in relations to Coral Impacts

      The following project work plans address this item:
      Resource Health and Sedimentation Monitoring Plan
      Operational Control Turbidity Monitoring Work Plan
      Resource Impact Assessment Monitoring Plan
      Net Environmental Effects Monitoring Plan
      Mitigation Plan

2. Prior to construction benthic communities' quantities should be determined for a baseline.

   The Resource Health and Sedimentation Monitoring Plan address this item.

3. Detailed location plan for spoil discharge pipe.

   B+B Dredging's work plan precludes the use or placement of any submerged or floating pipeline. This item is therefore not applicable.

4. Pre-project monitoring to determine turbidity levels and sedimentation:

The Resource Health and Sedimentation Monitoring Plan and Operational Control Turbidity Monitoring Work Plan address this item.

Develop turbidity level to monitor discharge pipeline.

B+B Dredging's work plan precludes the use or placement of any submerged or floating pipeline. This item is therefore not applicable.

5. Turbidity requirements shall not be violated.

The Operational Control Turbidity Monitoring Work Plan addresses this item.

Turbidity sampling shall be taken every two hours during dredging.

The operational dredging plan anticipates that the Trailing Hopper Dredge "Atchafalaya" will load in one hour in every four-hour cycle. A cycle includes loading the hopper (60 minutes), sailing to the open water placement area (90 minutes), placement of maintenance material (5 minutes) and sailing back to the dredge area (90 minutes).

6. Provide for pre-, during- and post-dredging water quality monitoring:

The Resource Health and Sedimentation Monitoring Plan and Operational Control Turbidity Monitoring Work Plan address this item.

7. Contingency Plan for Storms.

B+B Dredging's Severe Weather Response Program and Operational Contingency Plan address these items.

8. Placement of disposal Pipeline.

B+B Dredging's work plan precludes the use or placement of any submerged or floating pipeline. This item is therefore not applicable.

9. Placement of disposal Pipeline in ship channel.

B+B Dredging's work plan precludes the use or placement of any submerged or floating pipeline. This item is therefore not applicable.

10. Stability analysis for dredged material pipeline over entire length.

    B+B Dredging's work plan precludes the use or placement of any submerged or floating pipeline. This item is therefore not applicable.

11. Anchoring plan for dredged material pipeline.

    B+B Dredging's work plan precludes the use or placement of any submerged or floating pipeline. This item is therefore not applicable.

12. Anchoring Plan including anchoring method.

    B+B Dredging's work plan does not involve the use or placement of any anchors. The Anchoring Plan addressed cases of unexpected need for vessel anchorage.

13. Fleming Key's disposal management.

    B+B Dredging's work plan and project requirements does not involve the use of Fleming Key placement. All material is to be placed in the approved open water placement area. This item is therefore not applicable.

14. Fleming Key's disposal site turbidity controls.

    B+B Dredging's work plan and project requirements does not involve the use of Fleming Key placement. All material is to be placed in the approved open water placement area. This item is therefore not applicable.

15. Turbidity control devices at the dredge material disposal site.

    The Resource Health and Sedimentation Monitoring Plan and Operational Control Turbidity Monitoring Work Plan address this item.

16. Two week notification is required to FKNMS prior to disposal placement.

    This is part of B+B Dredging's work plan.

17. An Anchoring plan addressing no anchor zones.

    B+B Dredging's work plan does not involve the use or placement of any anchors. This item is therefore not applicable.

18. An Anchoring plan addressing alternative anchoring practices.

B+B Dredging's work plan does not involve the use or placement of any anchors. This item is therefore not applicable.

19. The use of tow vessels – no cables in the water, preventing damage to resources

B+B Dredging's work plan does not involve the use of towing vessels or beams for bottom leveling. This item is therefore not applicable.

Dragging other equipment on the bottom, preventing damage to resources.

The dredging method to be employed by B+B Dredging is positioning a draghead on the bottom of the ship channel in the areas where material is above project grade in required areas. The work plan addresses the positioning of the trailing hopper dredge and the tools available to ensure that the draghead remains in the ship channel and away from bottom resources.

20. Avoid benthic resources in the Key West Harbor and Turning Basin – 30 foot buffer area.

The designed dredge area for this contract are the Main Ship Channel and Cut – A as defined in the contract plans and specifications. No work dredging is planned in Key West Harbor and Turning Basin. This item is therefore not applicable.

21. South and Southeast walls of Truman Harbor, no dredging area.

The designed dredge area for this contract are the Main Ship Channel and Cut – A as defined in the contract plans and specifications. No dredging is planned in the area of the South and Southeast walls of Truman Harbor. This item is therefore not applicable.

22. Pre-construction meeting with maritime interest, monthly news releases, Notice to Mariners and other public awareness.

B+B Dredging regularly prepares USGC Notice to Marines (NTM) as a standard practice for all dredging projects. Typical steps include:

- Finalize the start date of the work.
- Finalize the mobilization schedule for the Atchafalaya.
- Translate the work area coordinates from State Plane to Geographic.
- Compose the NTM to include – name of contractor, work description, name and call sign of hopper dredge, VHF channels monitored, location of work, approximate work period and daily operational hours.
- For Key West, the NTM will be submitted to the 7th USCG Station in Miami.

The US Navy or the USACE will address all other news releases and public awareness.

23. An incident or accident notification plan.

B+B Dredging acknowledges the following response plans and will work within those plans to properly and timely notify all incidents as required:

- B+B Dredigng's Accident Prevention Plan will be submitted for USACE Approval
- Navy's Rapid Notification and Response Actions.

24. Activities to temporarily or permanently relocate resources allowing dredging to proceed.

During the initial survey of resources, prior to the startup of dredging, as defined in the Resource Impact Assessment Monitoring Plan, it will be determined if resources are in the areas to be dredged or have the potential to be impacted by dredging operations.

If it is determine that resources could be impacted directly by the dredging operations, a plan will be developed for each individual resource site by the Navy (permittee) to be approved by all corresponding agencies, that could include relocation and will direct B+B Dredging how to proceed in the specific areas.

25. Point of Contact for the FKNMS and FDEP.

The Notification and Response Protocols will be defined in the Navy's Mitigation Plan and Red Plan for Rapid Notification and Response Action Plan.

26. Point of contact for NOAA observer(s) to board vessel.

B+B Dredging will allow NOAA Observer(s) onto the "Atchafalaya" or other local, state or federal government employees when instructed by the USACE. All contact should be directed to our Project Manager or QC Officer.

27. Avoid injury to all federal protected species and marine communities.

All efforts as defined in the project work plan will be monitored and enforced to maximize avoidance of all federal protected species and marine communities.

28. Training for all vessel operators.

As defined in the contract specifications, paragraph 1.15 "Vessel operators Training", Section 02325, Page 9. All B+B Dredging's Vessel Operators will attend a training class highlighting the unique requirements for operating a vessel within the Florida Keys National Marine Sanctuary.

29. Standard Manatee construction measures.

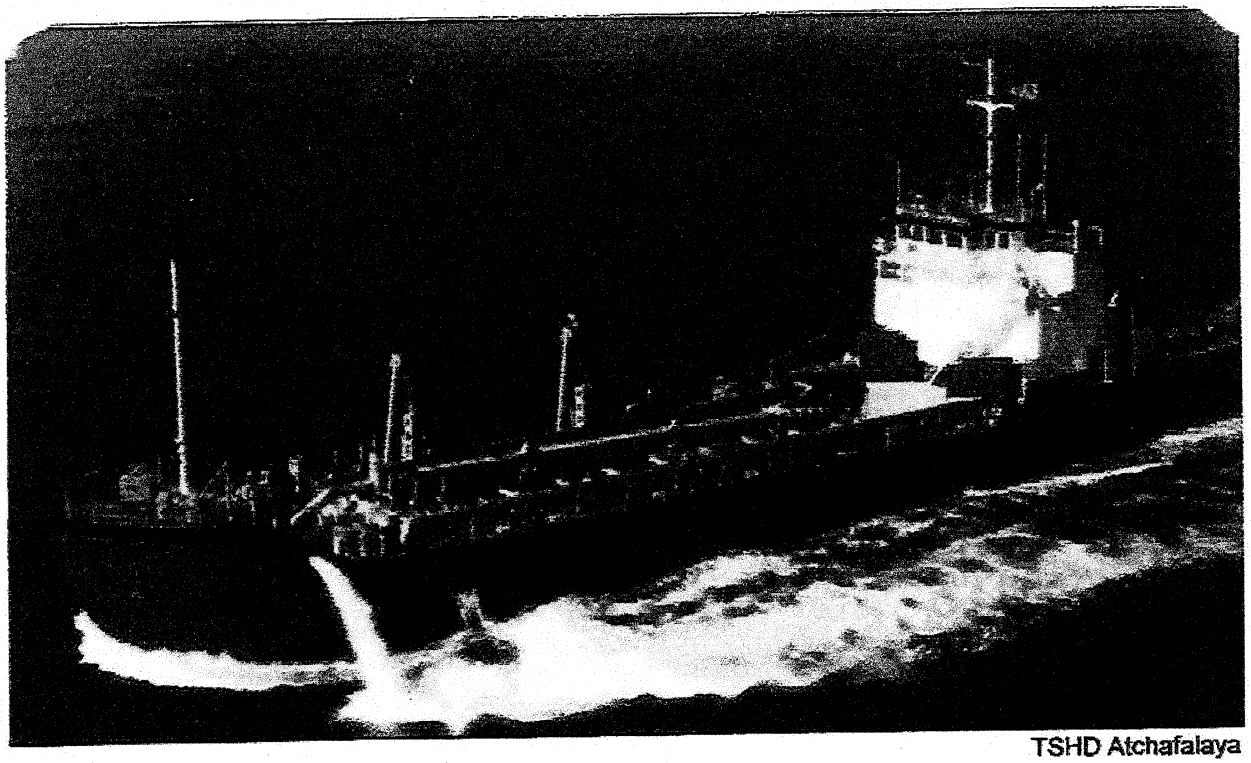
Measures to comply with Manatee permit requirements is standard practice for all our dredging projects completed in Florida waters.

ENCLOSURES

ENCLOSURES

Trailing Suction Hopper Dredge "Atchafalaya" Brochure

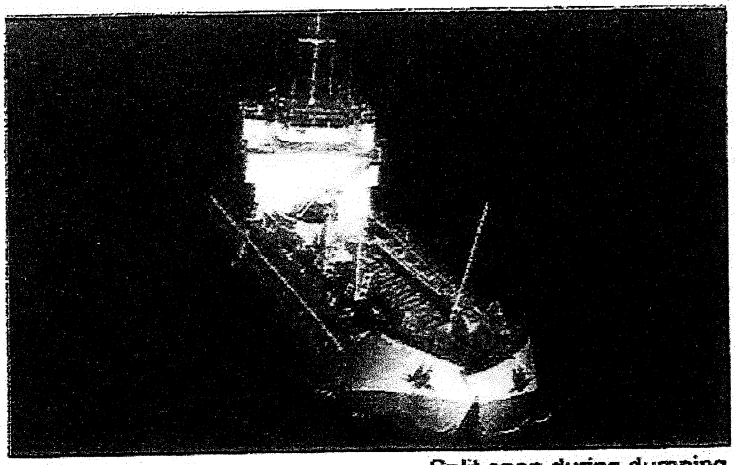
Trailing Suction Hopper Dredge
"Atchafalaya"



TSHD Atchafalaya

Vessel Specification

Length: 197 ft.
Breadth: 41 ft.
Light Draft: 7 ft.
Laden Draft: 14.6 ft.
Dragarms: 1
Pump Power: 1 @ 700 HP
Propulsion Power: 2 @ 850 HP
Suction Diameter: 22 In.
Discharge Diameter: 20 In.
Hopper Capacity: 1,300 cub. Yds.
Light Speed: 10 knts
Laden Speed: 9 knts
Max. Dredging Depth: 65 ft.



Split open during dumping

B+B Dredging Company

B+B Dredging Company
451 Dinwiddie Street
Portsmouth, Virginia 23704
Ph.: 757.393.3700 Fx.: 757.393.0603

US Coast Guard Load Line Certificate for the Atchafalaya

Certificate No. 8011075-7

INTERNATIONAL LOAD LINE CERTIFICATE

ISSUED UNDER THE PROVISIONS OF THE INTERNATIONAL CONVENTION ON LOAD LINES, 1966, AS MODIFIED BY THE PROTOCOL OF 1988 RELATING THERETO UNDER THE AUTHORITY OF THE GOVERNMENT OF

UNITED STATES OF AMERICA
Commandant, U.S. Coast Guard

By the American Bureau of Shipping

Particulars of Ship

Name of Ship	Distinctive Number or Letters	Port of Registry	Length (L) as defined in Article 2(8) (feet)	IMO Number[1]
ATCHAFALAYA	**630005**	**HOUMA**	**191.92**	**7914248**

Freeboard assigned as: * { A new ship / ~~An existing ship~~ }

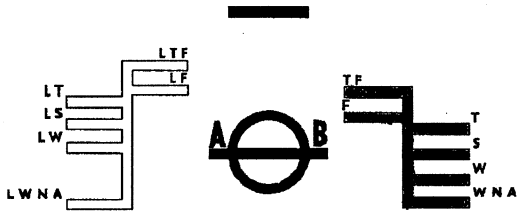
Type of Ship: * { ~~Type "A"~~ / ~~Type "B"~~ / Type "B" with reduced freeboard / ~~Type "B" with increased freeboard~~ }

* Delete whatever is inapplicable

Freeboard from Deck Line					Load Line	
Tropical	3	feet	3	inches (T)	3-1/4	inches above (S)
Summer	3	feet	6-1/4	inches (S)	Upper edge of line through center of ring	
Winter	3	feet	9-1/2	inches (W)	3-1/4	inches below (S)
Winter North Atlantic	3	feet	11-1/2	inches (WNA)	5-1/4	inches below (S)
Timber tropical	N/A	feet	N/A	inches (LT)	N/A	inches above (LS)
Timber summer	N/A	feet	N/A	inches (LS)	N/A	inches above (S)
Timber winter	N/A	feet	N/A	inches (LW)	N/A	inches below (LS)
Timber winter North Atlantic	N/A	feet	N/A	inches (LWNA)	N/A	inches below LS)
Allowance for fresh water for all freeboards other than timber	3-1/2	inches				
For timber freeboards	N/A	inches				

The upper edge of the deck line from which these freeboards are measured is: OPPOSITE TOP OF STEEL UPPER deck at side

PER U.S. COAST GUARD'S LETTER DATED: 12th MAY 1982, WHILE MAKING AN INTERNATIONAL VOYAGE UP TO 30 LONG TONS OF SHIP'S STORES IS PERMITTED IN THE HOPPERS.



THIS CERTIFICATE IS ISSUED IN CONJUCTION WITH EXEMPTION CERTIFICATE NO. E-8011075-7

[1] In accordance with the IMO Ship Identification Number Scheme, adopted by resolution A.600(15).

C-8011075-7
Certificate No.

COASTWISE LOAD LINE CERTIFICATE

Issued under the authority of the Commandant, U.S. Coast Guard, under the provisions of the Coastwise Load Line Act, 1935, as amended (46 U.S.C. 88-88g), and The Load Line Regulations in 46 CFR Part 42,

by the American Bureau of Shipping

duly authorized for assigning purposes under the provisions of this law for vessels engaging in coastwise and/or intercoastal voyages

Name of Ship	Official Number or Distinctive Letters	Port of Registry	Length (L) as defined in 46 CFR 42.13-15
ATCHAFALAYA	630005 IMO #7914248	HOUMA	191.92 '

Freeboard assigned as:A NEW SHIP

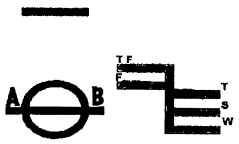
Type of Ship and Freeboard: TYPE "B" WITH REDUCED FREEBOARD

	Freeboard from deck line				*Load Line*	
Tropical	3	feet	3	inches (T)	3-1/4	inches above (S)
Summer	3	feet	6-1/4	inches (S)	Upper edge of line through center of ring	
Winter	3	feet	9-1/2	inches (W)	3-1/4	inches below (S)
Allowance for fresh water for all freeboards			3-1/2	inches.		

Note: *All measurements are to upper edge of the respective horizontal lines.* Freeboards and Load Lines which are not applicable need not be entered on the certificate.

The upper edge of the deck line from which these freeboards are measured is OPPOSITE TOP OF STEEL UPPER deck at side

THIS CERTIFICATE IS VALID ONLY SO LONG AS THE OPERATING RESTRICTIONS IN THE U.S. COAST GUARD'S STABILITY LETTER DATED 12th MAY 1982 ARE OBSERVED.



Date of initial or periodical survey 30 JUNE 2004

The following is a record of the restrictions applicable to the above named ship:
WHEN OPERATING ON A VOYAGE WITHIN THE FOLLOWING BOUNDARIES, THIS SHIP MAY BE LOADED TO A MOLDED RAFT OF 14'-7-1/2" NOT MORE THAN 10 FOOT WAVES, AND NOT MORE THAN 20 MILES FROM A SAFE REFUGE HARBOR, NOT MORE THAN 30 KNOT WINDS, NOT MORE THAN 10 FOOT WAVES, AND NOT ON AN INTERNATIONAL VOYAGE. THIS CERTIFICATE IS VALID ONLY FOR TERRITORIAL WATERS OF THE UNITED STATES.

THIS IS TO CERTIFY that this ship has been surveyed and that the freeboards have been assigned and load lines shown above have been marked in accordance with the Commandant, U.S. Coast Guard, Coastwise Load Line Regulations in 46 CFR Part 42 and Parts 44 to 46, inclusive, as applicable.

This certificate is valid until 30th JUNE 2009*, subject to annual surveys in accordance with applicable Load Line Regulations, and endorsement thereof on the reverse side of the Certificate.

*At the expiration of the certificate, applicable reissuance should be obtained in accordance with the Load Line Regulations.

Issued at HOUSTON, TEXAS on 31St MARCH 2005

The undersigned declares that he is duly authorized by the said government to issue this Certificate.

E.L. BECHE,- *American Bureau of Shipping*

ABS

INTERNATIONAL LOAD LINE EXEMPTION CERTIFICATE

ISSUED UNDER THE PROVISIONS OF THE

INTERNATIONAL CONVENTION ON LOAD LINES, 1966,
AS MODIFIED BY THE PROTOCOL OF 1988 RELATING THERETO

E-8011075-7
Certificate No.

UNDER THE AUTHORITY OF THE GOVERNMENT OF

UNITED STATES OF AMERICA
(name of the State)

by E.L.B ECHE
Surveyor, American Bureau of Shipping

Particulars of Ship:

Name of Ship	Distinctive Number or Letters	Port of Registry	Length (L) as defined in article 2(8) (in meters)	IMO Number[1]
ATCHAFALAYA	630005	HOUMA	191.92FT	7914248

THIS IS TO CERTIFY that the ship is exempted from the provisions of the Convention, under the authority conferred by article 6(2)/6(4)[2] of the Convention referred to above.

The provisions of the Convention from which the ship is exempted under article 6(2) are:
NO HATCH COVERS ON THE MAIN DECK

The voyage for which exemption is granted under article 6(4) is:

From: N/A

To: N/A

Conditions, if any, on which the exemption is granted under either article 6(2) or article 6(4):
WHILE MAKING AN INTERNATIONAL VOYAGE, UP TO 30 LONG TONS TO SHIP'S STORES IS PERMITTED IN THE HOPPERS, THIS CERTIFICATE IS VALID ONLY SO LONG AS THE OPERATING RESTRICTIONS IN THE U.S. COAST GUARD'S STABILITY LETTER DATED 12 MAY 1982 ARE OBSERVED

This certificate is valid until 30 JUNE 2009 [3] subject to annual surveys in accordance with article 14(1)(c) of the Convention.
Completion date of the survey on which this certificate is based: 7 OCTOBER 2004

Issued at HOUSTON, TEXAS
Place of issue of certificate

31 MARCH 2005
Date of issue

E.L. BECHE *Surveyor, American Bureau of Shipping*

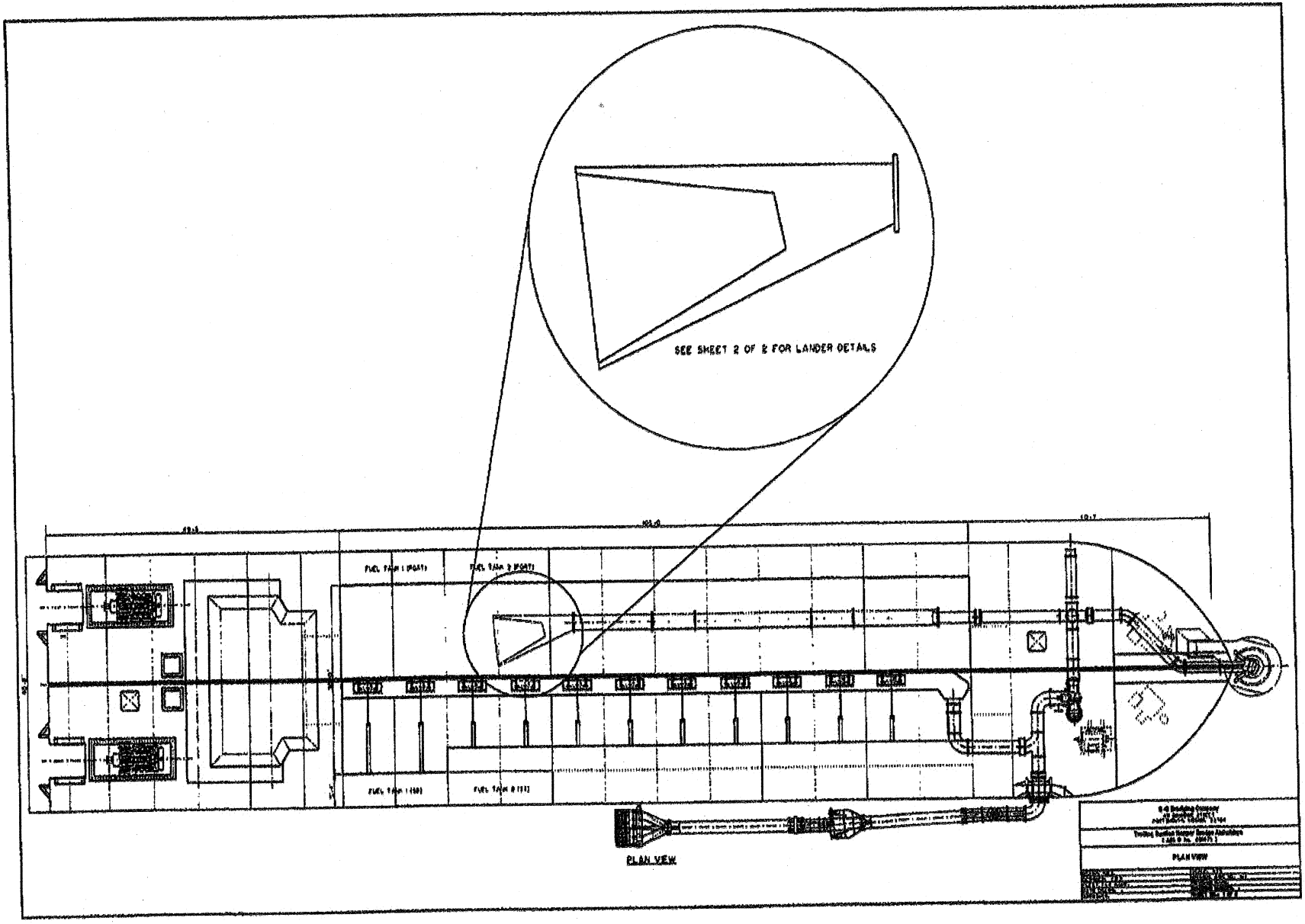
ABS

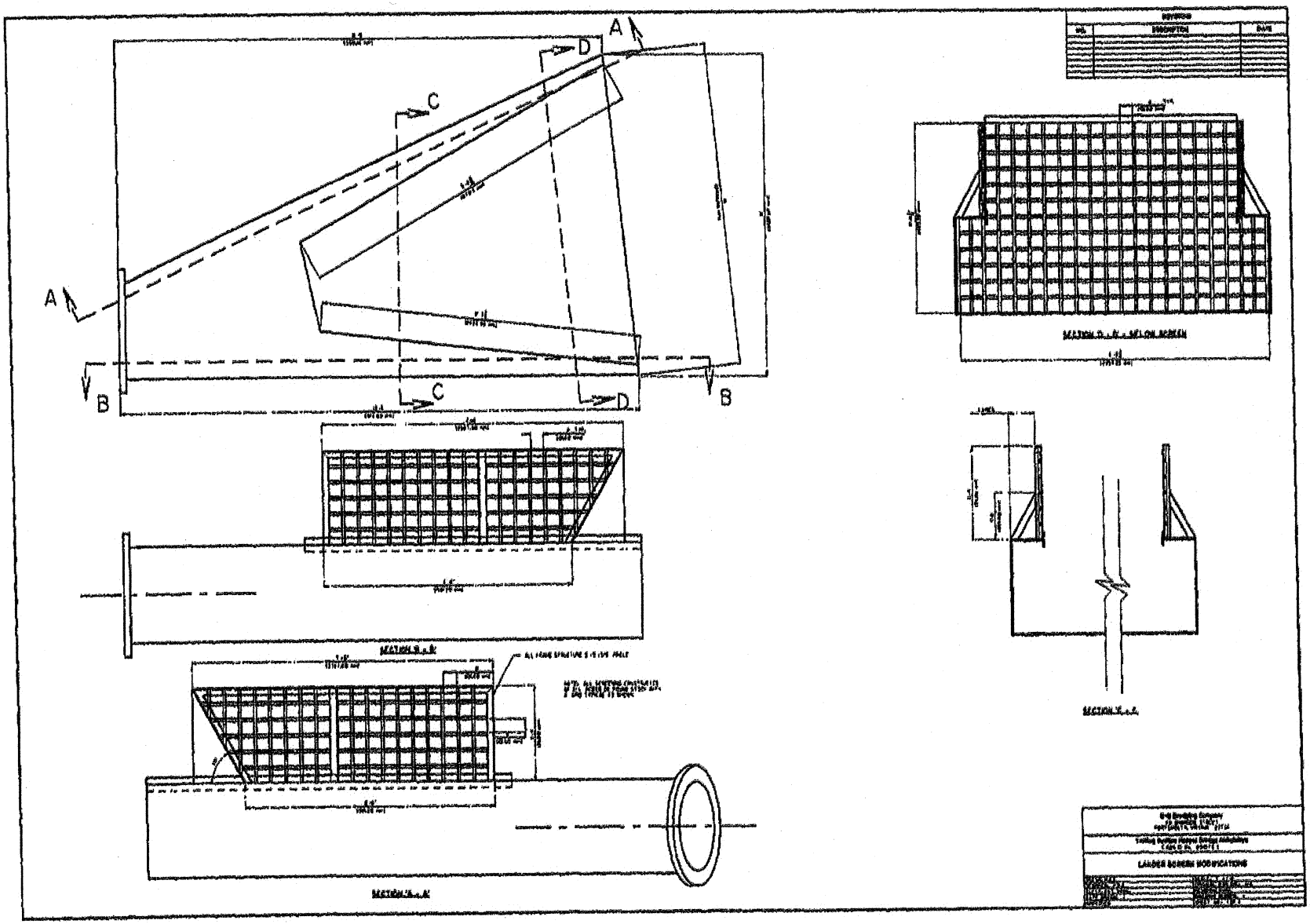
1 In accordance with the IMO Ship Identification Number Scheme, adopted by Resolution A.600(15).

2 Delete as appropriate

3 Insert the date of expiry as specified by the Administration in accordance with article 19(10) of the Convention. The day and the month of this date correspond to the anniversary date as defined in article 2(9) of the Convention unless amended in accordance with article 19(8) of the Convention.

DREDGE ATCHAFALAYA PROFILE AND SCREENING


SEE SHEET 2 OF 2 FOR LANDER DETAILS
PLAN VIEW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Contract Work Areas – Main Ship Channel & Cut A

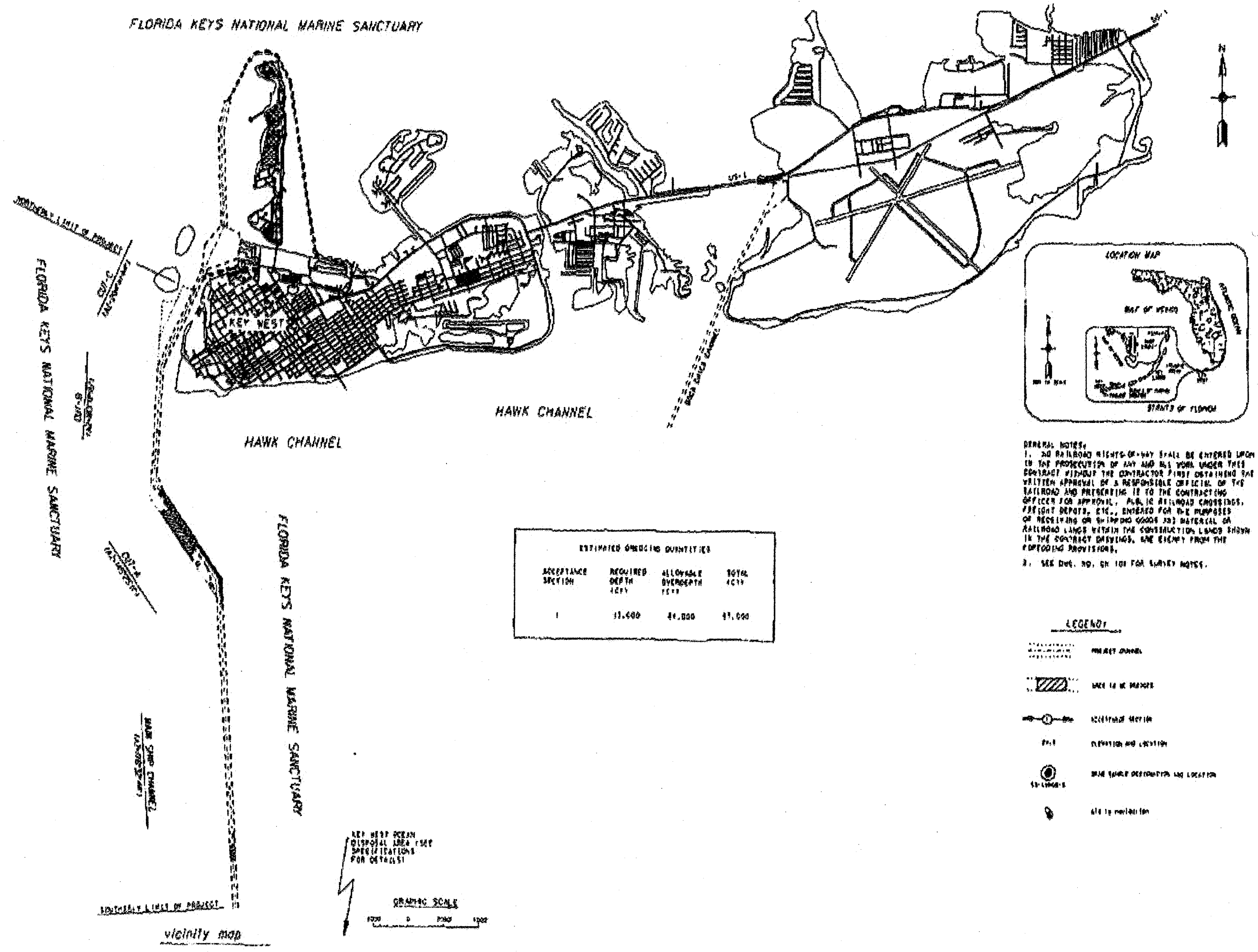
DREDGE WORK AREAS

Work areas for dredging were defined by the contract plans. They include the following areas of the Main Ship Channel and Cut - A.

Channel Location	Station to Station	Range	Required Grade
Main Ship Channel	1. 26+00 to 30+00	25 to 275	36+1
	2. 30+00 to 34+00	00 to 300	36+1
	3. 39+00 to 41+00	00 to 100	36+1
	4. 165+00 to 181+00	00 to 100	36+1
Cut – A	5. (-)1+00 to 1+00	625 to 800	36+1
	6. 00+00 to 20+00	00 to 100	36+1
	7. 12+50 to 14+50	550 to 750	36+1
	8. 17+00 to 20+00	700 to 750	36+1
	9. 20+00 to 21+00	400 to 750	36+1
	10. 20+00 to 23+00	00 to 150	36+1
	11. 22+00 to 23+00	300 to 750	36+1
	12. 23+00 to 48+00	00 to 750	36+1
	13. 48+00 to 49+50	550 to 750	36+1
	14. 48+00 to 52+00	00 to 300	36+1
	15. 52+00 to 59+00	00 to 200	36+1

Enclosures:

General Location Map – Main Ship Channel to Key West Harbor
Main Ship Channel, Station 0+00 to 30+00
Main Ship Channel, Sation 30+00 to 60+00
Main Ship Channel, Station 150+00 to 181+00
Cut – A, Station 0+00 to 27+00
Cut – A, Station 27+00 to 57+00
Cut – A, Station 57+00 to Cut – A, Station25+00



ESTIMATED DREDGING QUANTITIES			
ACCEPTANCE SECTION	REQUIRED DEPTH (CY)	ALLOWABLE OVERDEPTH (CY)	TOTAL (CY)
1	13,000	44,000	57,000

GENERAL NOTES:

1. NO RAILROAD RIGHTS-OF-WAY SHALL BE ENTERED UPON IN THE PROSECUTION OF ANY AND ALL WORK UNDER THIS CONTRACT WITHOUT THE CONTRACTOR FIRST OBTAINING THE WRITTEN APPROVAL OF A RESPONSIBLE OFFICIAL OF THE RAILROAD AND PRESENTING IT TO THE CONTRACTING OFFICER FOR APPROVAL. PUBLIC RAILROAD CROSSINGS, FREIGHT DEPOTS, ETC., ENTERED FOR THE PURPOSES OF RECEIVING OR SHIPPING GOODS AND MATERIAL OR RAILROAD LANDS WITHIN THE CONSTRUCTION LANDS SHOWN IN THE CONTRACT DRAWINGS, ARE EXEMPT FROM THE FOREGOING PROVISIONS.

2. SEE DWG. NO. GN 101 FOR SURVEY NOTES.

LEGEND:

- PROJECT CHANNEL
- AREA TO BE DREDGED
- ACCEPTANCE SECTION
- ELEVATION AND LOCATION
- BORING/SAMPLE DESIGNATION AND LOCATION

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

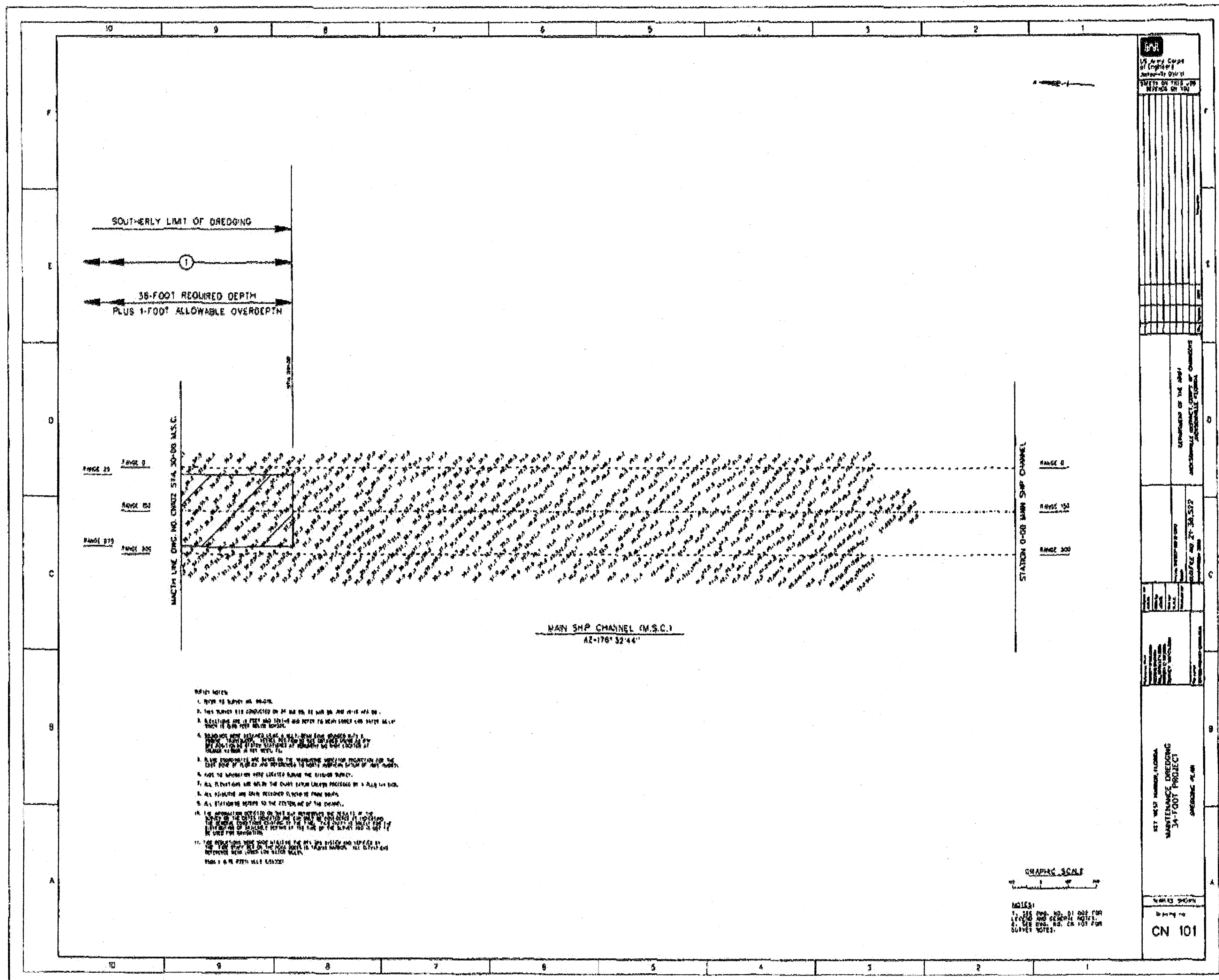
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

FILE NO. 21-38,522

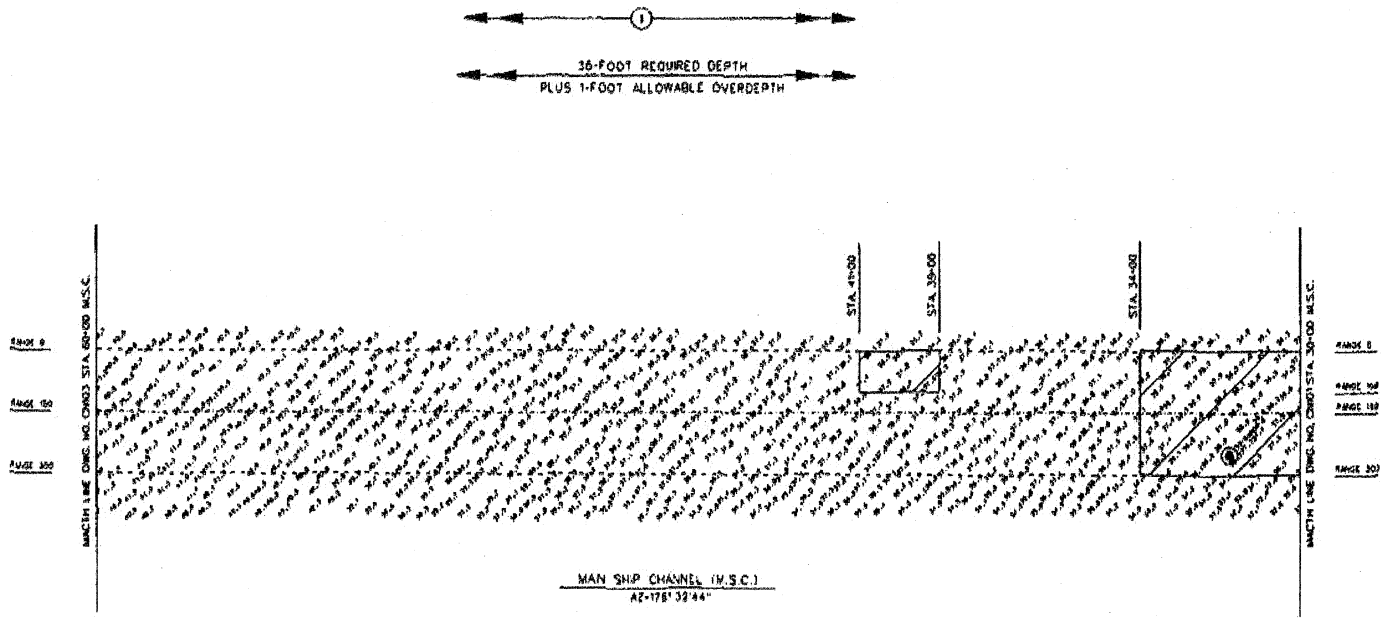
KEY WEST HARBOR, FLORIDA
MAINTENANCE DREDGING
34-FOOT PROJECT
LOCATION, VICINITY MAP, LEGEND, GENERAL NOTES, AND DREDGING QUANTITIES

SCALE AS SHOWN

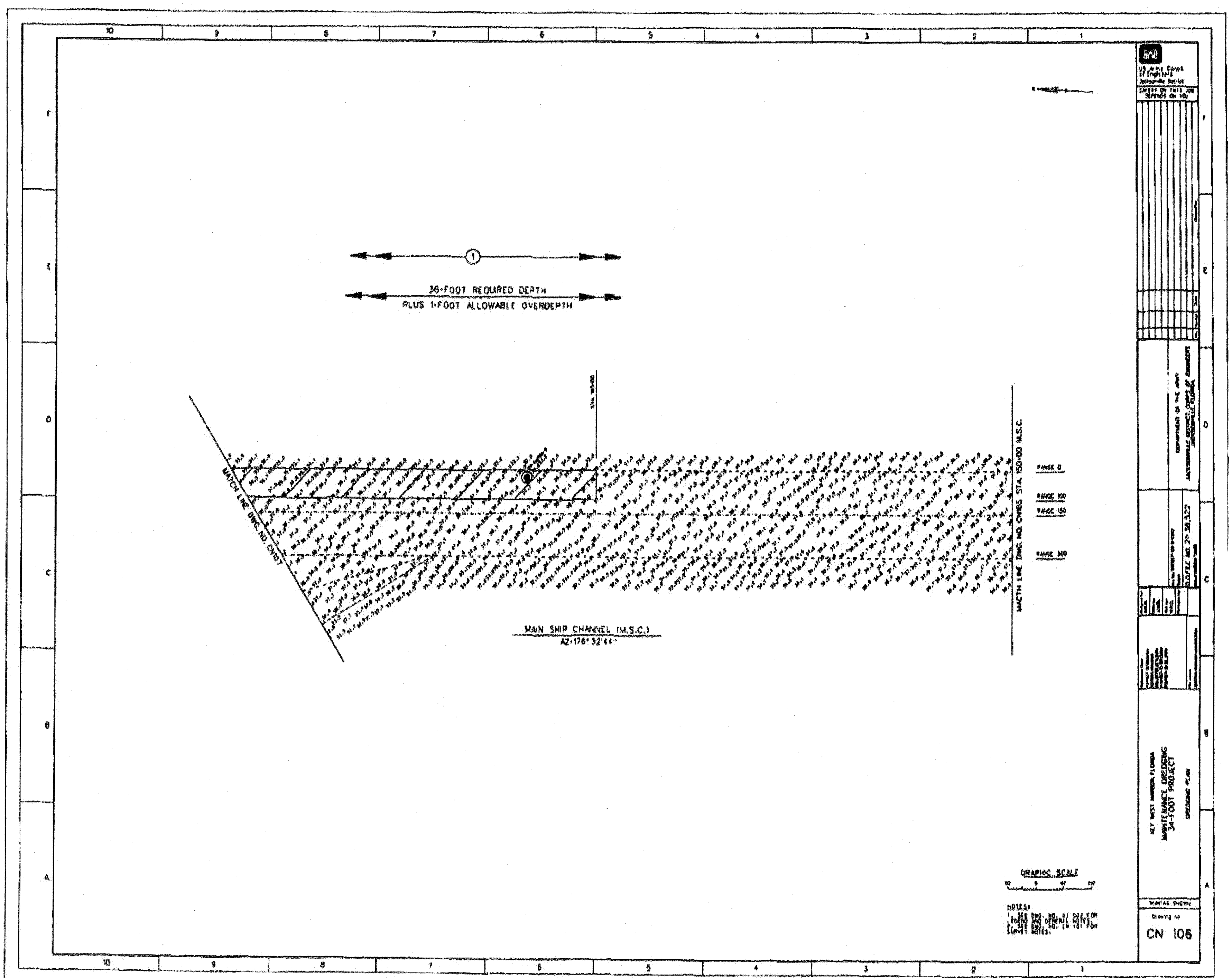
Drawing no.
G1002



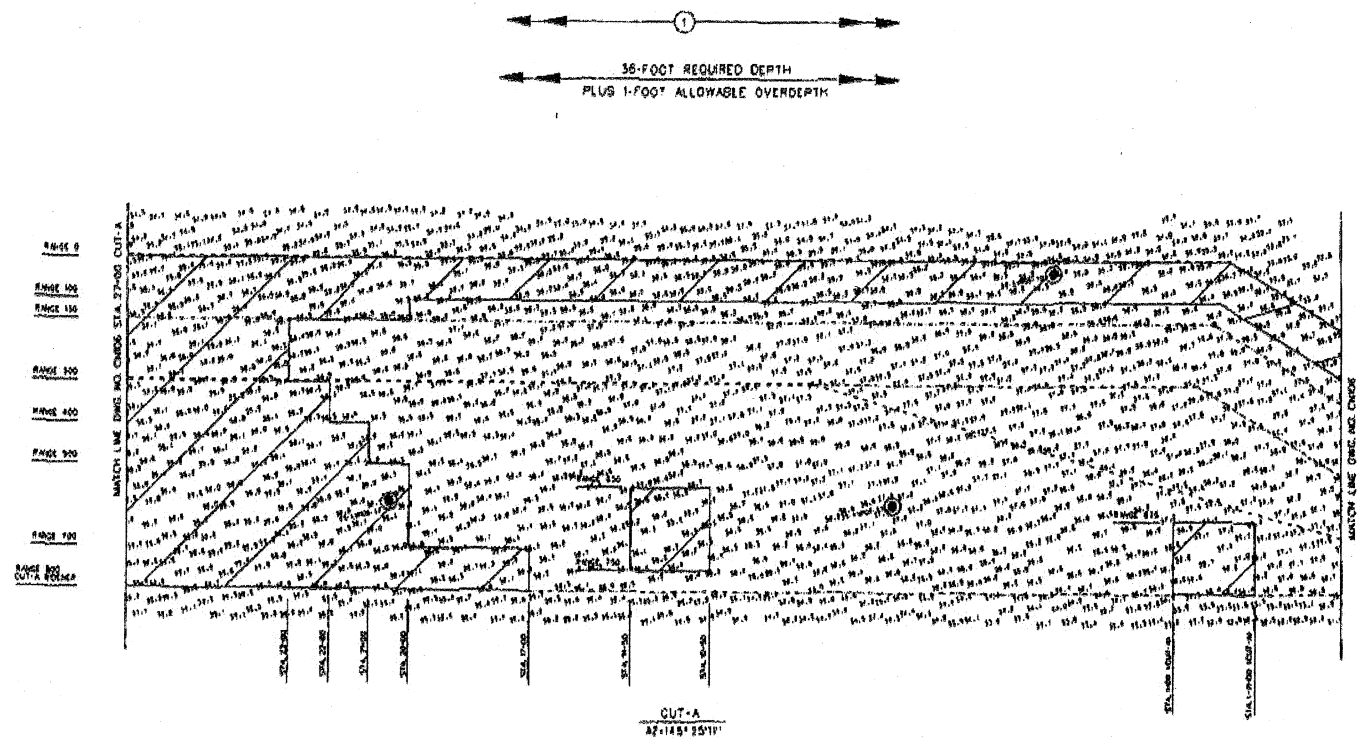
SOUTHERLY LIMIT OF DREDGING
1
38-FOOT REQUIRED DEPTH
PLUS 1-FOOT ALLOWABLE OVERDEPTH
MATCH LINE DWG. NO. CN102 STA. 30+00 M.S.C.
STATION 0+00 MAIN SHIP CHANNEL
MAIN SHIP CHANNEL (M.S.C.)
AZ=176° 32'44"
GRAPHIC SCALE
NOTES:
1. SEE DWG. NO. G1 002 FOR LEGEND AND GENERAL NOTES.
2. SEE DWG. NO. CN 101 FOR SURVEY NOTES.
US Army Corps of Engineers
Jacksonville District
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA
KEY WEST HARBOR, FLORIDA
MAINTENANCE DREDGING
34-FOOT PROJECT
DREDGING PLAN
CN 101


36-FOOT REQUIRED DEPTH
PLUS 1-FOOT ALLOWABLE OVERDEPTH
STA. 41+00
STA. 39+00
STA. 34+00
MAIN SHIP CHANNEL (M.S.C.)
AZ=178° 32' 44"
GRAPHIC SCALE

CN 102

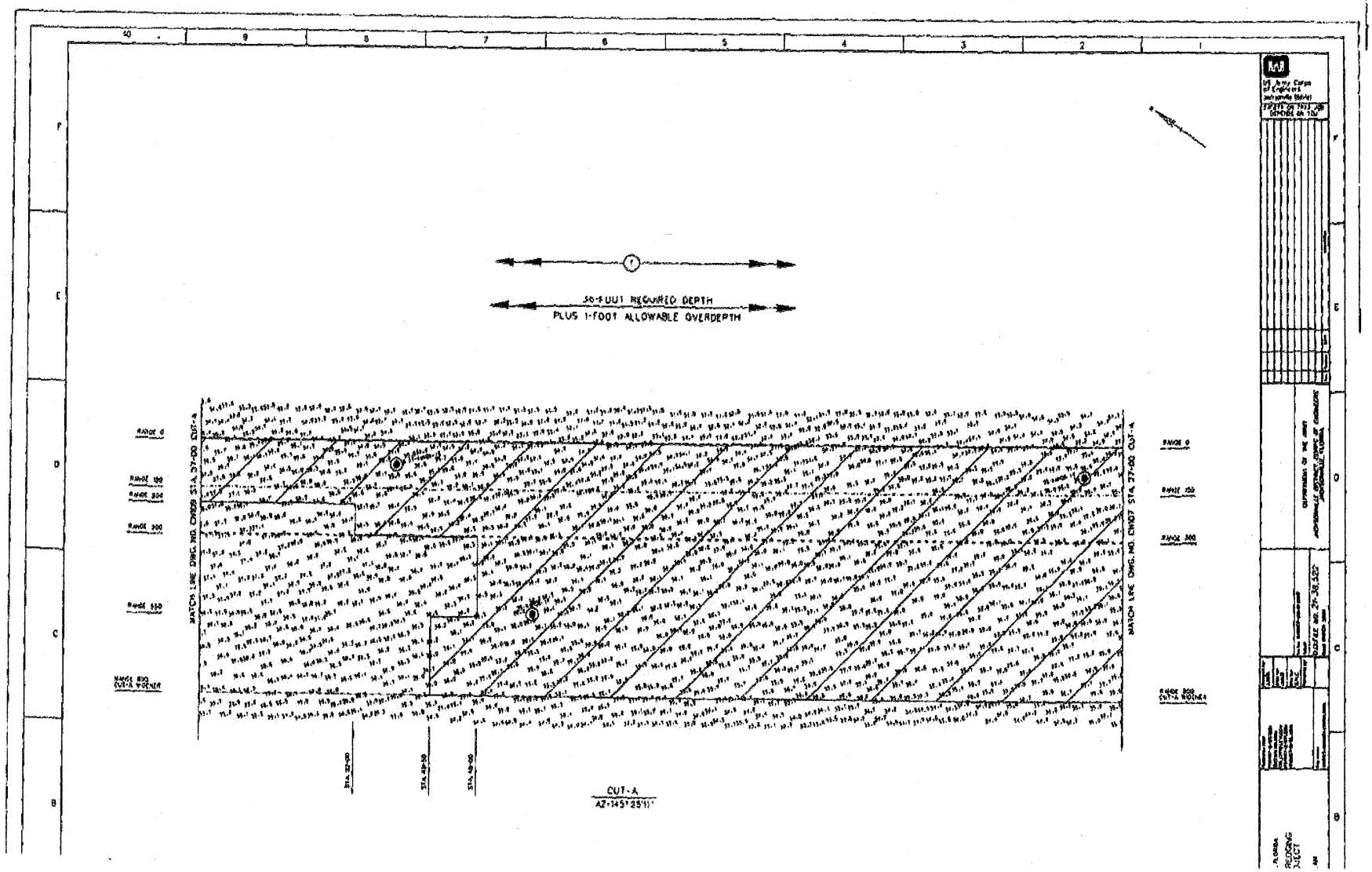


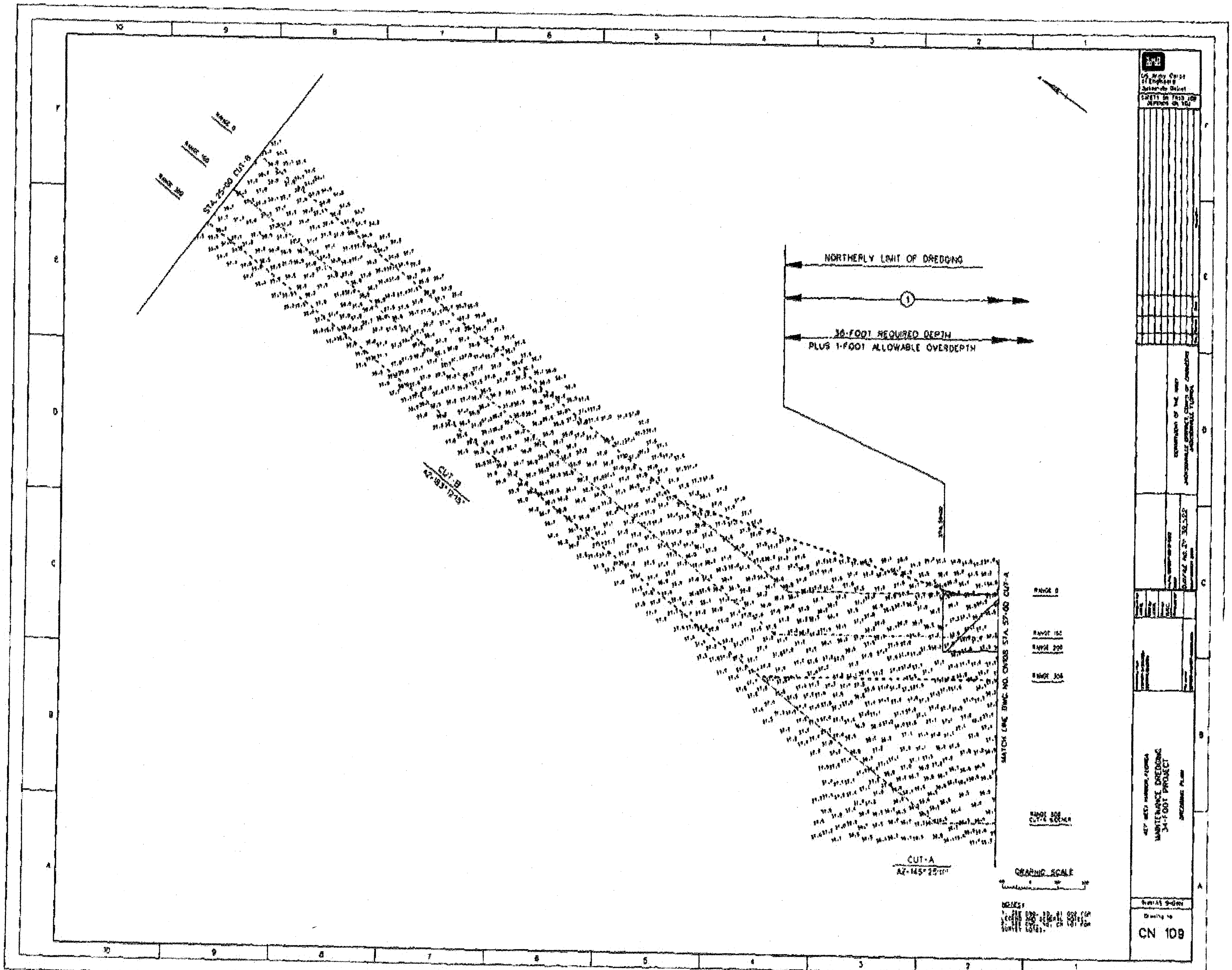
36-FOOT REQUIRED DEPTH
PLUS 1-FOOT ALLOWABLE OVERDEPTH
MAIN SHIP CHANNEL (M.S.C.)
MACTH LINE DWG. NO. CN105 STA. 150+00 M.S.C.
GRAPHIC SCALE
KEY WEST HARBOR, FLORIDA
MAINTENANCE DREDGING
34-FOOT PROJECT
DREDGING PLAN
DEPARTMENT OF THE ARMY
CN 106



KEY WEST HARBOR, FLORIDA
MAINTENANCE DREDGING
36-FOOT PROJECT

Drawing no.
CN 107

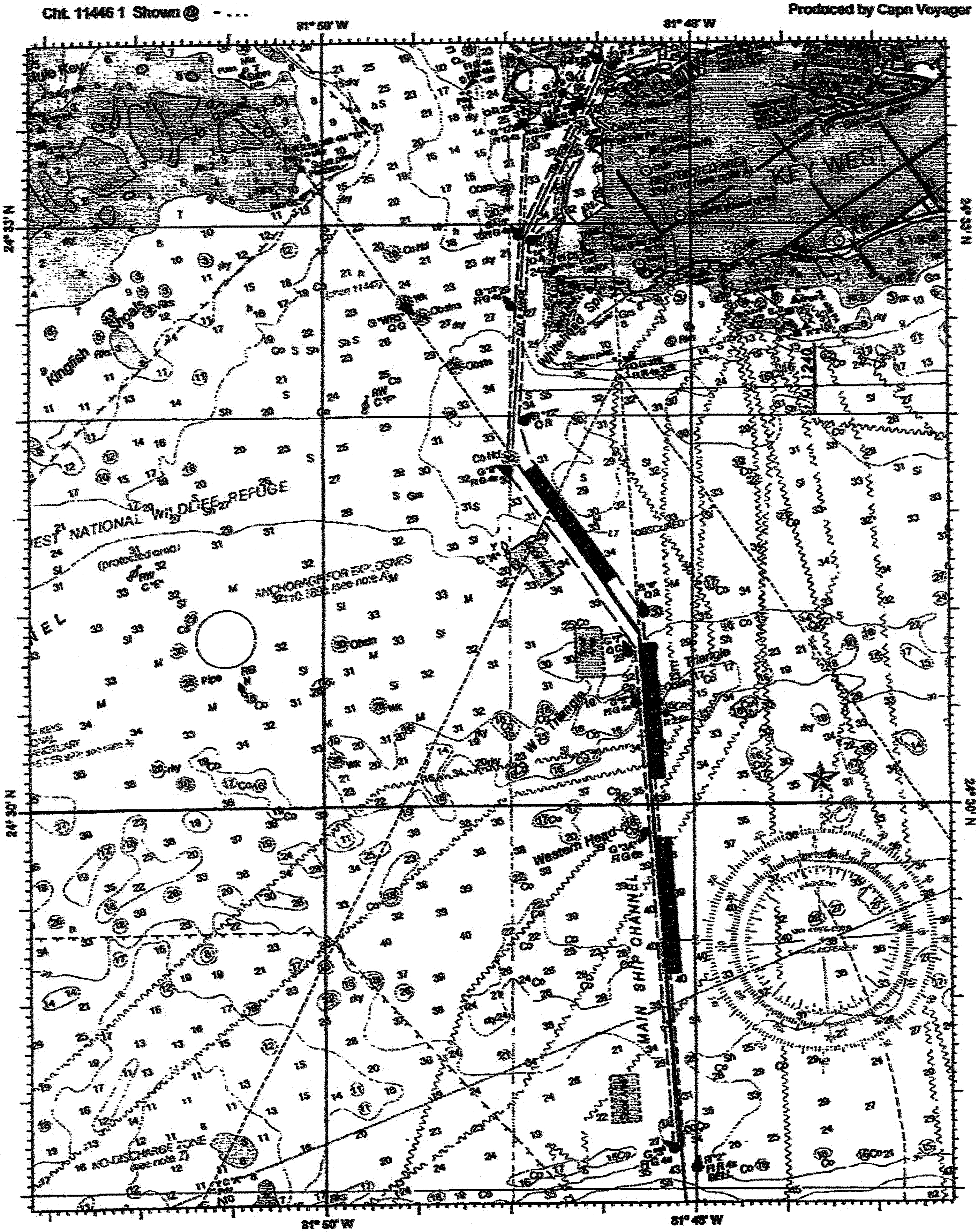

50-FOOT REQUIRED DEPTH
PLUS 1-FOOT ALLOWABLE OVERDEPTH
MATCH LINE DWG. NO. CW09 STA. 37+00 CUT-A
MATCH LINE DWG. NO. CW07 STA. 27+00 CUT-A
CUT-A
AZ=145°25'11"


STA. 25+00 CUT-B
RANGE 0
RANGE 150
RANGE 300
NORTHERLY LIMIT OF DREDGING
1
36-FOOT REQUIRED DEPTH
PLUS 1-FOOT ALLOWABLE OVERDEPTH
CUT-B
CUT-A
MATCH LINE DWG NO. CN108 STA. 57+00 CUT-A
GRAPHIC SCALE
NOTES:
MAINTENANCE DREDGING
34-FOOT PROJECT
CN 109

ODMDS ROUTE – TRANSIT TO & FROM

Cht. 11446 1 Shown @ - . . .

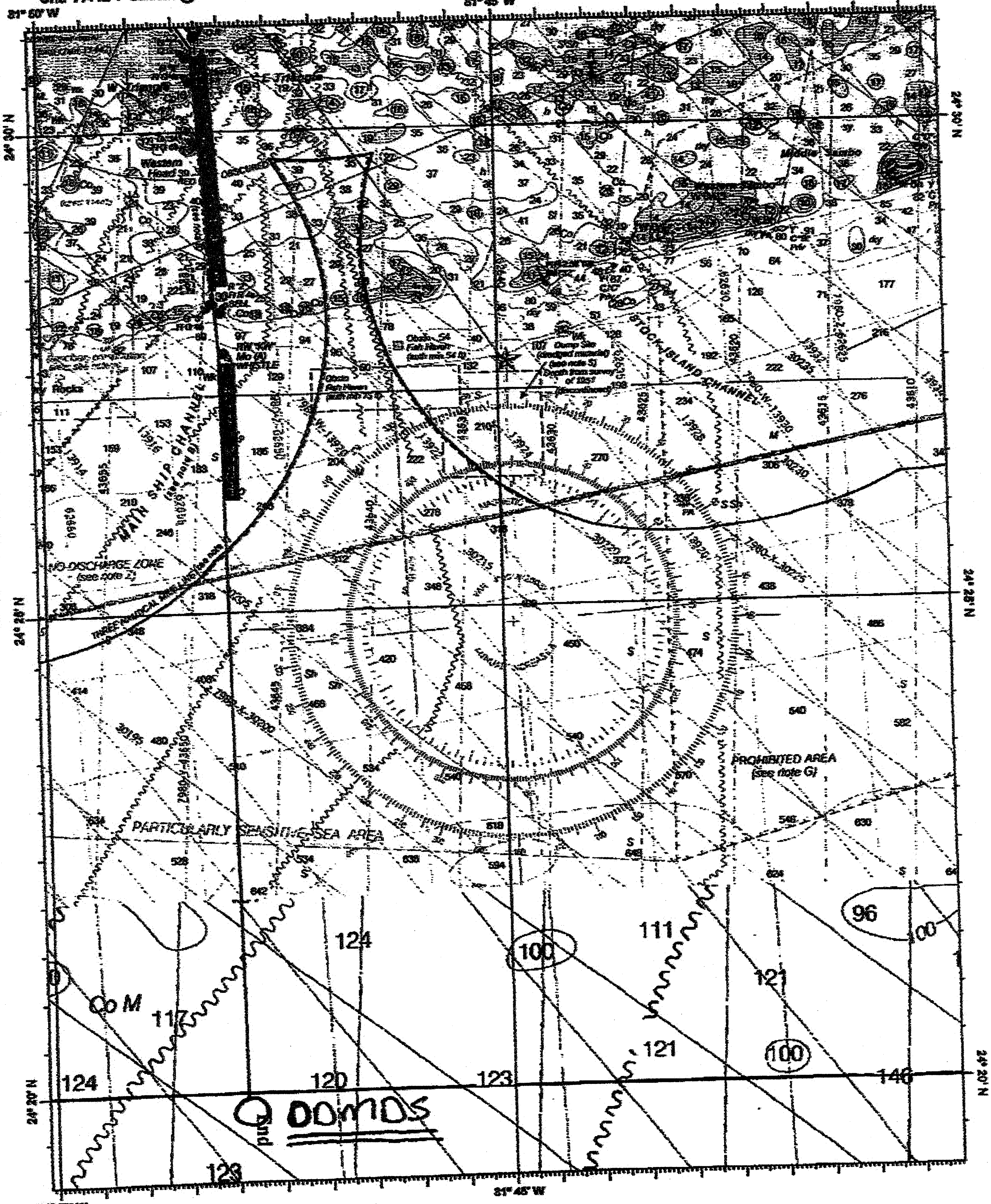
Produced by Capn Voyager



Edition Date 12/01/2003 . . .

Produced by Capn Voyager

Cht. 11442 1 Shown @ - ...



Edition Date 07/01/2003 ...

Route Name: key west to dump
Depart from:
Destination:

Uses Charts:
11447, 11441, 11434

Route has 5 waypoints covering 12.0 nm

Time enroute = Total Time – N/A

Notes for this route:

key west to dump

Leg	Name and Position	Inbound	Outbound	ETA & ATA
01	Wpt 1 24° 31' 45" N 081° 48' 56" W	Begin	Out - 146° T 1.06 nm	ATA_____
	Speed 0.00 Start . . . Dist. Left 12.0 nm Leg Time N/A			
02	Wpt 2 24° 30' 53" N 081° 48' 17" W	In - 146° T 1.06 nm	Out - 176° T 1.01 nm	ATA_____
	Speed 0.00 Dist. Run 1.06 nm Dist. Left 10.9 nm Leg Time N/A			
03	Wpt 3 24° 29' 52" N 081° 48' 13" W	In - 176° T 1.01 nm	Out - 176° T 2.21 nm	ATA_____
	Speed 0.00 Dist. Run 2.07 nm Dist. Left 9.93 nm Leg Time N/A			
04	Wpt 4 24° 27' 40" N 081° 48' 02" W	In - 176° T 2.21 nm	Out - 179° T 7.72 nm	ATA_____
	Speed 0.00 Dist. Run 4.27 nm Dist. Left 7.72 nm Leg Time N/A			
05	Wpt 5 24° 19' 57" N 081° 47' 54" W	In - 179° T 7.72 nm	End	ATA_____
	Speed 0.00 Dist. Run 12.0 nm Dist. Left 0 yds Leg Time N/A			

"Outbound" Shows Course to Next Waypoint

SILENT INSPECTOR DATA OUTPUT EXAMPLE

DATA LOG
Cape May

Dredge: Atchafalaya

11/20/2006 5:58:31 PM
Captain: Pilgrim

Load	Date	Time	Dredge Pump Vac.	Press.	RPM	Vel.	Sg	Ave Draft	Displ. Gross/Net	Bin Data Volume/BinSg/TDS	Adj. Tide	Drag Depth	X	Y
33	11/20/2006	5:58:31 PM	-11.2	015	256	16	1.074	07.2	1327 / 0167	0209 / 1.068 / 0015	0.6	00.4	0377176.1	0027258.1
33	11/20/2006	5:59:31 PM	-12.3	015	256	16	1.078	07.2	1319 / 0159	0210 / 1.006 / 0000	0.6	00.4	0376869.0	0026923.3
33	11/20/2006	6:00:31 PM	-10.7	015	257	16	1.074	07.2	1323 / 0163	0215 / 1.018 / 0000	0.6	00.4	0376480.0	0026632.5
33	11/20/2006	6:01:31 PM	-13.5	015	257	16	1.072	07.2	1317 / 0157	0211 / 1.000 / 0000	0.6	00.4	0376145.8	0026317.6
33	11/20/2006	6:02:31 PM	-00.0	000	022	07	0.753	06.6	1204 / 0044	0184 / 1.000 / 0000	0.6	00.4	0375764.9	0026013.4
33	11/20/2006	6:03:31 PM	-00.0	000	000	05	0.447	06.6	1206 / 0046	0192 / 1.000 / 0000	0.6	00.4	0375345.1	0025748.9
33	11/20/2006	6:04:32 PM	-00.0	000	000	00	0.406	06.7	1230 / 0070	0191 / 1.000 / 0000	0.6	00.4	0375031.0	0025652.6
33	11/20/2006	6:05:32 PM	-00.0	000	000	00	0.401	06.7	1221 / 0061	0195 / 1.000 / 0000	0.6	08.1	0374840.8	0025558.0
33	11/20/2006	6:06:32 PM	-15.0	009	248	23	0.958	07.1	1309 / 0149	0298 / 1.000 / 0000	0.7	12.8	0374573.8	0025324.1
33	11/20/2006	6:07:32 PM	-23.8	012	248	17	1.192	07.6	1398 / 0238	0395 / 1.000 / 0000	0.7	21.6	0000000.0	0000000.0
33	11/20/2006	6:08:32 PM	-34.1	008	251	18	1.350	08.1	1493 / 0333	0457 / 1.000 / 0000	0.7	22.9	0374315.9	0025069.0
33	11/20/2006	6:09:32 PM	-29.7	010	250	18	1.476	08.4	1573 / 0413	0570 / 1.000 / 0000	0.7	25.4	0374170.2	0024946.4
33	11/20/2006	6:10:32 PM	-30.6	012	252	17	1.370	08.9	1671 / 0511	0659 / 1.033 / 0009	0.7	27.1	0000000.0	0000000.0
33	11/20/2006	6:11:32 PM	-24.3	012	251	18	1.411	09.4	1772 / 0612	0717 / 1.134 / 0127	0.7	28.7	0373920.8	0024791.6
33	11/20/2006	6:12:32 PM	-24.4	011	252	20	1.311	09.7	1838 / 0678	0769 / 1.173 / 0186	0.7	30.1	0373810.9	0024729.2
33	11/20/2006	6:13:32 PM	-29.5	010	251	20	1.292	10.0	1894 / 0734	0792 / 1.233 / 0269	0.7	31.2	0373774.5	0024652.7
33	11/20/2006	6:14:32 PM	-04.3	008	178	17	1.351	10.1	1908 / 0748	0797 / 1.251 / 0295	0.7	32.7	0000000.0	0000000.0
33	11/20/2006	6:15:32 PM	-29.5	011	248	15	1.407	10.1	1918 / 0758	0792 / 1.277 / 0326	0.7	33.5	0373581.8	0024673.8
33	11/20/2006	6:16:32 PM	-33.1	010	246	16	1.362	10.2	1927 / 0767	0878 / 1.164 / 0199	0.8	34.5	0373504.5	0024684.0
33	11/20/2006	6:17:32 PM	-32.0	010	247	16	1.402	10.2	1934 / 0774	0873 / 1.181 / 0223	0.8	35.5	0000000.0	0000000.0
33	11/20/2006	6:18:32 PM	-34.2	011	247	13	1.473	10.2	1939 / 0779	0859 / 1.211 / 0261	0.8	35.9	0373357.8	0024765.0
33	11/20/2006	6:19:32 PM	-27.2	011	247	15	1.527	10.2	1942 / 0782	0865 / 1.203 / 0252	0.8	34.5	0373216.2	0024838.4
33	11/20/2006	6:20:32 PM	-29.8	011	247	13	1.507	10.3	1951 / 0791	0860 / 1.224 / 0280	0.8	36.0	0373202.3	0025013.2
33	11/20/2006	6:21:32 PM	-27.8	009	248	19	1.283	10.4	1981 / 0821	0880 / 1.242 / 0313	0.8	35.6	0000000.0	0000000.0
33	11/20/2006	6:22:32 PM	-21.7	010	248	20	1.283	10.4	1984 / 0824	0884 / 1.242 / 0314	0.8	36.4	0373309.1	0025164.4
33	11/20/2006	6:23:32 PM	-24.0	010	248	19	1.219	10.5	2000 / 0840	0887 / 1.259 / 0339	0.8	36.4	0373341.7	0025258.2
33	11/20/2006	6:24:32 PM	-22.9	010	248	20	1.197	10.5	2000 / 0840	0887 / 1.259 / 0339	0.8	36.8	0000000.0	0000000.0
33	11/20/2006	6:25:32 PM	-00.0	005	068	10	1.194	10.5	1992 / 0832	0876 / 1.263 / 0341	0.8	32.8	0373303.0	0025446.1
33	11/20/2006	6:26:32 PM	-17.7	012	252	20	1.026	10.4	1981 / 0821	0845 / 1.297 / 0375	0.9	36.4	0373255.0	0025529.1
33	11/20/2006	6:27:32 PM	-34.2	009	250	14	1.199	10.6	2009 / 0849	0873 / 1.296 / 0387	0.9	37.3	0373175.5	0025668.4
33	11/20/2006	6:28:32 PM	-34.2	011	247	09	1.635	10.5	1997 / 0837	0865 / 1.288 / 0372	0.9	36.5	0000000.0	0000000.0
33	11/20/2006	6:29:32 PM	-22.5	013	248	14	1.705	10.5	1995 / 0835	0828 / 1.340 / 0425	0.9	35.4	0373240.9	0025892.1
33	11/20/2006	6:30:32 PM	-34.2	011	248	14	1.317	10.6	2025 / 0865	0887 / 1.303 / 0403	0.9	35.8	0373310.2	0026005.2
33	11/20/2006	6:31:32 PM	-25.5	010	250	18	1.270	10.7	2038 / 0878	0873 / 1.338 / 0446	0.9	36.1	0000000.0	0000000.0
33	11/20/2006	6:32:32 PM	-34.2	010	249	14	1.345	10.7	2037 / 0877	0871 / 1.340 / 0449	0.9	37.3	0373331.9	0026070.6
33	11/20/2006	6:33:32 PM	-32.3	009	250	17	1.362	10.8	2048 / 0888	0871 / 1.358 / 0474	0.9	36.7	0373349.6	0026126.2
33	11/20/2006	6:34:32 PM	-20.2	010	251	21	1.246	10.9	2071 / 0911	0865 / 1.401 / 0531	0.9	36.3	0373371.0	0026159.0
33	11/20/2006	6:35:32 PM	-31.5	009	252	20	1.232	10.9	2072 / 0912	0874 / 1.390 / 0521	0.9	36.1	0000000.0	0000000.0
33	11/20/2006	6:36:32 PM	-34.2	009	252	18	1.335	10.8	2065 / 0905	0865 / 1.393 / 0520	0.9	36.4	0373389.7	0026299.5
33	11/20/2006	6:37:32 PM	-34.2	009	250	17	1.304	10.9	2073 / 0913	0865 / 1.408 / 0541	0.9	36.0	0373384.6	0026364.0
33	11/20/2006	6:38:32 PM	-22.7	011	251	20	1.311	10.9	2082 / 0922	0871 / 1.409 / 0547	0.9	34.9	0000000.0	0000000.0
33	11/20/2006	6:39:32 PM	-32.8	009	251	19	1.327	10.9	2080 / 0920	0859 / 1.426 / 0563	0.9	35.1	0373353.8	0026499.6
33	11/20/2006	6:40:32 PM	-34.1	009	251	19	1.313	10.9	2087 / 0927	0851 / 1.450 / 0590	0.9	35.1	0373366.5	0026552.1
33	11/20/2006	6:41:32 PM	-34.2	010	250	14	1.371	11.0	2104 / 0944	0853 / 1.475 / 0626	0.9	35.0	0000000.0	0000000.0
33	11/20/2006	6:42:32 PM	-34.2	009	251	18	1.427	11.0	2101 / 0941	0852 / 1.470 / 0620	0.9	34.9	0000000.0	0000000.0
33	11/20/2006	6:43:32 PM	-26.5	011	252	18	1.430	11.0	2109 / 0949	0848 / 1.492 / 0647	0.9	34.8	0373277.4	0026810.5
33	11/20/2006	6:44:32 PM	-25.5	010	251	19	1.329	11.0	2110 / 0950	0870 / 1.452 / 0606	0.9	34.3	0373238.7	0026922.5
33	11/20/2006	6:45:32 PM	-34.2	009	253	18	1.389	11.1	2115 / 0955	0854 / 1.488 / 0647	0.9	34.4	0000000.0	0000000.0
33	11/20/2006	6:46:32 PM	-34.2	008	252	17	1.399	11.1	2127 / 0967	0877 / 1.467 / 0634	1.0	34.8	0373175.6	0027186.0
33	11/20/2006	6:47:32 PM	-34.2	011	251	16	1.405	11.2	2133 / 0973	0862 / 1.504 / 0675	1.0	35.6	0373166.3	0027302.9
33	11/20/2006	6:48:32 PM	-34.2	009	252	18	1.377	11.3	2154 / 0994	0840 / 1.579 / 0761	1.0	35.8	0000000.0	0000000.0
33	11/20/2006	6:49:32 PM	-34.2	008	250	14	1.452	11.2	2150 / 0990	0847 / 1.559 / 0739	1.0	36.9	0373197.5	0027561.2
33	11/20/2006	6:50:32 PM	-34.2	009	249	17	1.252	11.3	2155 / 0995	0867 / 1.526 / 0710	1.0	37.7	0373201.5	0027719.7
33	11/20/2006	6:51:32 PM	-34.2	009	251	16	1.511	11.3	2159 / 0999	0844 / 1.573 / 0756	1.0	37.7	0373179.9	0027883.9
33	11/20/2006	6:52:32 PM	-22.4	011	250	20	1.411	11.4	2179 / 1019	0843 / 1.613 / 0810	1.0	38.3	0000000.0	0000000.0
33	11/20/2006	6:53:32 PM	-31.5	012	252	13	1.369	11.4	2186 / 1026	0861 / 1.590 / 0795	1.0	40.0	0373358.2	0028086.8
33	11/20/2006	6:54:32 PM	-34.2	010	252	17	1.405	11.4	2194 / 1034	0858 / 1.607 / 0816	1.0	38.5	0373383.5	0027984.4
33	11/20/2006	6:55:32 PM	-33.5	010	252	17	1.588	11.5	2201 / 1041	0854 / 1.622 / 0833	1.0	38.6	0000000.0	0000000.0
33	11/20/2006	6:56:32 PM	-34.2	008	250	16	1.445	11.5	2212 / 1052	0841 / 1.667 / 0883	1.0	37.4	0373217.4	0027839.8
33	11/20/2006	6:57:32 PM	-34.2	012	252	13	1.655	11.5	2206 / 1046	0848 / 1.643 / 0857	1.1	35.6	0373116.9	0027730.2
33	11/20/2006	6:58:32 PM	-34.2	009	252	20	1.369	11.6	2231 / 1071	0853 / 1.673 / 0903	1.1	34.8	0372956.8	0027583.9
33	11/20/2006	6:59:32 PM	-33.7	011	254	18	1.369	11.7	2239 / 1079	0858 / 1.673 / 0908	1.1	34.2	0000000.0	0000000.0
33	11/20/2006	7:00:32 PM	-25.4	012	248	17	1.354	11.7	2237 / 1077	0861 / 1.664 / 0899	1.1	34.3	0373121.9	0027336.5
33	11/20/2006	7:01:32 PM	-27.8	011	252	18	1.438	11.6	2236 / 1076	0851 / 1.686 / 0919	1.1	34.1	0373177.4	0027234.0
33	11/20/2006	7:02:32 PM	-34.2	010	255	18	1.368	11.8	2266 / 1106	0857 / 1.714 / 0964	1.1	33.3	0000000.0	0000000.0
33	11/20/2006	7:03:32 PM	-34.2	010	255	17	1.471	11.7	2251 / 1091	0855 / 1.697 / 0939	1.1	34.2	0373185.2	0026892.8
33	11/20/2006	7:04:32 PM	-25.2	011	251	19	1.390	11.7	2255 / 1095	0852 / 1.708 / 0951	1.1	34.8	0373144.7	0026714.9
33	11/20/2006	7:05:32 PM	-22.6	011	250	18	1.367	11.8	2269 / 1109	0863 / 1.713 / 0970	1.1	34.5	0373089.8	0026528.5
33	11/20/2006	7:06:32 PM	-34.2	010	251	17	1.352	11.8	2273 / 1113	0851 / 1.743 / 0999	1.1	35.2	0000000.0	0000000.0
33	11/20/2006	7:07:32 PM	-28.1	012	252	16	1.490	11.9	2279 / 1119	0848 / 1.757 / 1014	1.2	35.9	0373211.1	0026319.6
33	11/20/2006	7:08:32 PM	-31.2	009	251	09	1.472	11.9	2289 / 1129	0851 / 1.769 / 1034	1.2	36.7	0373261.5	0026167.0
33	11/20/2006	7:09:32 PM	-34.2	011	250	15	1.424	12.0	2305 / 1145	0860 / 1.775 / 1054	1.2	35.8	0000000.0	0000000.0
33	11/20/2006	7:10:32 PM	-28.1	012	246	18	1.329	12.0	2311 / 1151	0859 / 1.781 / 1062	1.2	36.3	0373175.6	0025743.9

ATCHAFALAYA MATES LOG EXAMPLE

DAILY REPORT: HOPPER DREDGE ATCHAFALAYA

B + B DREDGING COMPANY

Cape May, NJ Pump Out 11/19/06

WEEK NO.

Date:

REPORT NO:

DREDGEMASTER:
Captain Nelson
Captain Pilgrim

DAY OF WEEK: S M T W T F S

PAGE of

HOPPER CAPACITY: 1,300 CYDS

LOAD NO.	NO. OF CUTS	PUMPS START	PUMPS STOP	MINUTES PUMPING	MINUTES TURNING	STATION FROM TO	LENGTH OF CUT	HEIGHT OF TIDE	DRAG DEPTH MAX.	AT DUMP ARRIVED	AT DUMP LEFT	MINUTES TO DUMP	MINUTES DUMPING	TO CUT	TOTAL CYCLE	MILES TO DUMP	MILES TO CUT	SPEED TO DUMP	SPEED TO CUT	DRAFT LIGHT FWD AFT	DRAFT LOADED FWD AFT	CUBIC YARDS PER LOAD	DISPLACEMENT LIGHT / LOADED TONS	NET TONS
26			126	86						220	520	54	180		320							842		
27		603	740	97						830	1045	50	111	43	301							900		
28		1140	1304	84						1350	1640	46	170	55	355							795		
29		1750	1934	101	3					2027	2253	53	146	50	353							935		
30		2342	2400	18										49	67									
TOTALS:				386	3							203	607	197	1396							3,472		
AVERAGES:				48	1							29	152	28	279							868		

REMARKS:

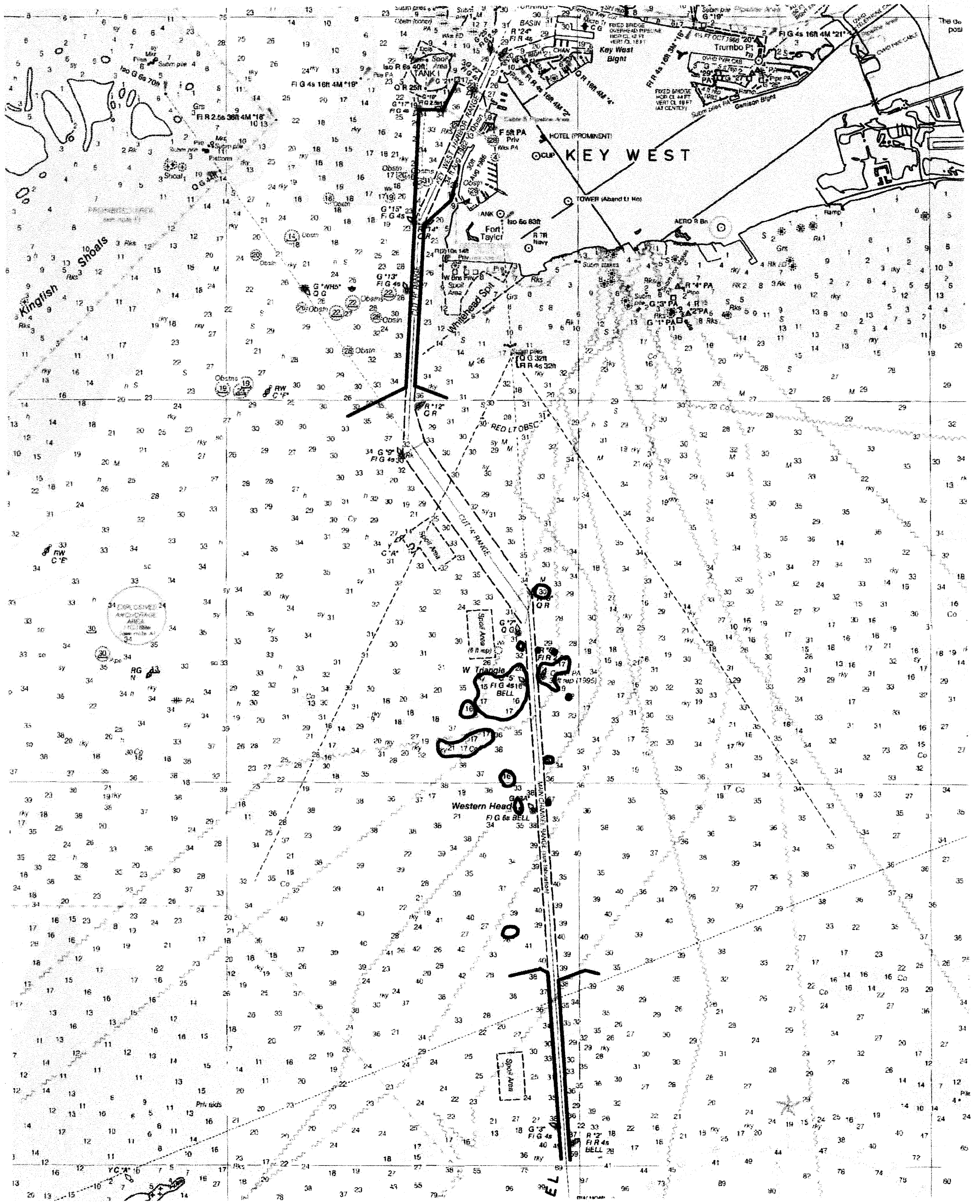
1014-1038 (24mins) making steering adjustments
1730-1750 (20mins) repairs to flushing lines in hopper

0000-0600	TIDE	SET(good,fair,poor)
0600-1200		
1200-1800		
1800-2400		

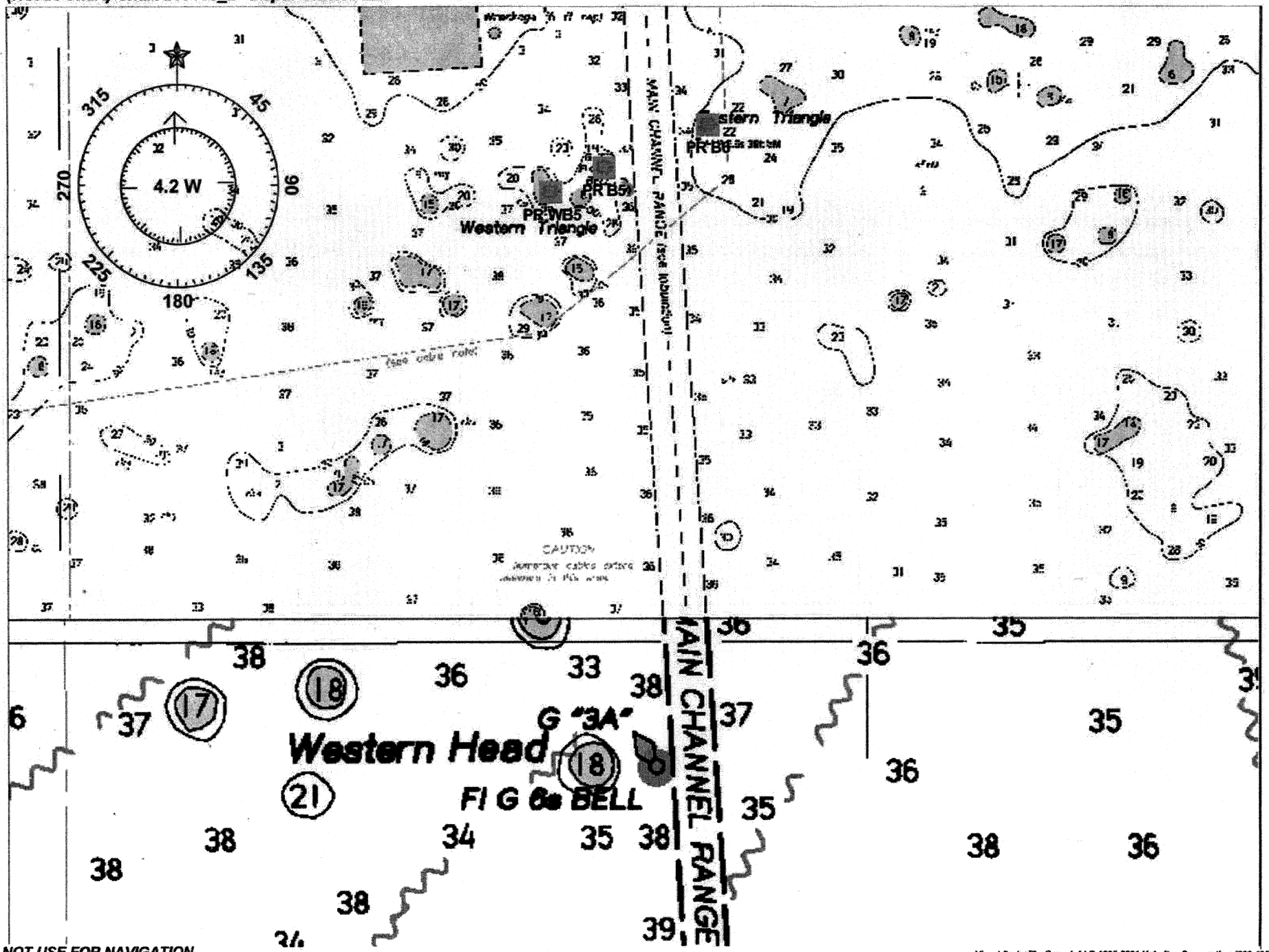
FKNMS NO ANCHOR ZONES

Inital Draft
3/14/03

GPS COORDINATES	RADIUS OF BUFFER AREA	HABITAT TYPE
24° 30.538' N	0.010 nm	PATCH REEF
81° 48.322' W		W-NW of Bell Buoy 5
24° 30.511' N	0.025 nm	PATCH REEF
81° 48.390' W		PR W of Bell Buoy 5
24° 30.587' N	0.025 nm	PATCH REEF
81° 48.198' W		E-NE of Buoy 6
24° 29.830' N	0.037 nm	PATCH REEF
81° 48.298' W		Western Head
24° 28.339' N	0.025 nm	PATCH REEF
81° 48.280' W		S end Main Ship Char
24° 33.4781' N	0.010 nm	Muir wreck
81° 43.1664' W		Boca Chica Channel
24° 33.513 to 24° 33.485' N	10 meter wide	Cut Legde Coral HB
81° 48.908 to 81° 48.906' W	linear 0.057 nm track	KW Turning Basin
24° 33.507 to .517 to .520 to .521 to .520	10 meter wide	Cut Ledge Coral HB
81° 48.894 to .832 to .802 to .790 to .776	linear 0.108 nm track	KW Turning Basin


KEY WEST
Key West Bight
Trumbo Pt
Garrison Bight
HOTEL (PROMINENT)
TOWER (Aband Lt Ho)
Fort Taylor
Kingfish Shoals
Whitehead Spit
W Triangle
Western Head
Spoil Area
CUT "A" RANGE
CUT "B" RANGE
RED LT OBSC

SUGARLOAF KEY TO KEY WEST - 1 : 32,896
(NOAA Chart) Chart #11445_2 - Depth Units: FEET



DO NOT USE FOR NAVIGATION

FILE: 1917/KEYWEST-DREDGING/1917DRED-NOANCHOR.DWG DATED: 05/28/03